27. Inventory Logistical Management (ILM)

27.1 Remedy-ILM (Inventory, Logistics and Maintenance {ILM} Manager)

ILM helps the M&O staffs at the EDF and DAACs maintain records that describe all inventory items, as well as their EIN structures, repair histories, and locations. The system keeps chronological histories (a record of the transactions) of installation, relocation, movement, shipment and archiving of inventory items. ILM is used by the Property Management, Maintenance, and Logistics teams in managing the tangible property of NASA's EOSDIS project. In addition, this system also manages COTS software license information, such as the Rights-to-use purchased, allocated, and remaining.

ILM is a customized application of the Remedy Action Request System (ARS). The customizations adapt the product to the ILS processes used for ECS. ILM takes into account how business rules and logistics concepts are applied on the ECS project. This document does not address these considerations in detail, but the following general introduction should help.

Each inventory item is identified by a unique Equipment Inventory Number (EIN). In the case of hardware items, an EIN corresponds to a silver sticker affixed to the item. Some of the items are shipped to sites and installed. Others such as consumables are issued but not installed. After a period, some items may be transferred to other locations or relocated for use with other parent machines. Items are archived when no longer needed or serviceable.

For tracking and auditing purposes, inventory items – especially hardware – are allocated to ECS "parent" machines. These parent and child relationships are called an EIN structure. EIN structures have active and inactive dates that establish the timeframe during which the pairing is in effect.

Table 27.1-1 summarizes the operator functions that Remedy ILM supports, and table 27.1-2 describes Remedy-ILM user groups and what privileges each group have. The sections that follow present how to use Remedy features that were customized for ECS inventory, logistics, and maintenance management. In addition, these sections also have detail instructions on how to perform functions designed for each individual form. For more information on Remedy's Action Request System, refer to Remedy help manual.

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Table 27.1-1. Common ECS Operator Functions Performed with ILM

Operating Function	GUI	Section	Description	When and Why to Use	
Remedy Overview	Navigating Remedy User Tool Defining Search Criteria ILM Predefined Reports	27.2.1 27.2.2 27.2.3	Overview of Remedy User Tool.	To Navigate, search, and run ad hoc and predefined reports.	
Property Management	ILM-EIN ILM-EIN Structure ILM-EINTransactions ILM-Transaction Log ILM-OEM Parts ILM-Vendor-MFR ILM-HwSw Code ILM-Status Codes ILM-Maint Contract ILM-Sites ILM-Inventory Location	27.3.1 27.3.2 27.3.3 27.3.4 27.3.5 27.3.6 27.3.7 27.3.8 27.3.9 27.3.10 27.3.11	Maintain information about accountable property items, their product structures, and inter-relationships.	To maintain information that specifies the identity, source, location, transfer, relocation, and installation of procured inventory items.	
Property Maintenance	ILM-MWO ILM-MWO Line Item	27.4.1 27.4.2	Manage information for required maintenance repairs.	To track and monitor maintenance activities	
License Management	ILM-License Product ILM-License Entitlement ILM-License ILM-License Mapping ILM-Additional Host	27.5.1 27.5.2 27.5.3 27.5.4 27.5.5	Manage entitlements, licenses, and license allocations for licensed COTS software.	To track the receipt, movement, and consumption of software licenses and their associated rightsto-use.	
System Administrator	ILM-System Parameters Intersite Date Exchange User Remedy Admin Tool Database Special Constraints Event and Error Messages	27.6.1 27.6.2 to 27.6.4 27.6.5 27.6.6 27.6.7 27.6.8 27.6.9	Manage AR System	Uses by Remedy Administrator to administrate Remedy Tool.	

Table 27.1-2. Remedy-ILM Groups Description (1 of 3)

Group Name	Description	Access
ILMAdmin	Full privileges to all operator and system administrator functions within ILM	ALL ILM related Forms
ILMProperty	To maintain information that specifies the identity, source, location, transfer, relocation, and installation of procured inventory items.	 ILM-EIN (Change) ILM-EIN Transactions (Change) ILM-Transaction Log (View) ILM-Vendor-MFR (Change) ILM-HwSw Code (View) ILM-OEM Parts (Change) ILM-Status Codes (View) ILM-Sites (View) ILM-Sites (View) ILM-Inventory Location (View) ILM-MWO (Change) ILM-MWO Line Item (Change) ILM-License Product (View) ILM-License Entitlement (View) ILM-License (View) ILM-License Mapping (View) ILM-Additional Host (View)
ILMContract	Maintains maintenance contract purchased for ECS Hardware and COTS software.	 ♦ ILM-Additional Host (View) ♦ ILM-EIN (Change - only to the Maint Contract ID, Maint Exp Date, and Maint Vendor on this form) ♦ ILM-EIN Transactions (View) ♦ ILM-EIN Transaction Log (View) ♦ ILM-Vendor-MFR (View) ♦ ILM-HwSw Code (View) ♦ ILM-OEM Parts (View) ♦ ILM-Status Codes (View) ♦ ILM-Sites (View) ♦ ILM-Sites (View) ♦ ILM-Inventory Location (View) ♦ ILM-MWO (View) ♦ ILM-MWO Line Item (View) ♦ ILM-License Product (View) ♦ ILM-License Entitlement (Change only to the Maint Contract ID and Maint Exp Date on this form) ♦ ILM-License (View) ♦ ILM-License Mapping (View) ♦ ILM-Additional Host (View)

Table 27.1-2. Remedy-ILM Groups Description (2 of 3)

Group Name	Description	Access
ILMlicuser	License management data update privileges for software license administrators	 ILM-EIN (View) ILM-EIN Transactions (View) ILM-Transaction Log (View) ILM-Vendor-MFR (View) ILM-HwSw Code (View) ILM-OEM Parts (View) ILM-Status Codes (View) ILM-Sites (View) ILM-Indentory Location (View) ILM-Inventory Location (View) ILM-MWO (View) ILM-MWO Line Item (View) ILM-License Product (Change) ILM-License (Change) ILM-License Mapping (Change) ILM-Additional Host (Change)
ILMmaint	Maintenance management data update privileges for EDF's Maintenance Coordinator	 ILM-EIN (View) ILM-EIN Transactions (View) ILM-Transaction Log (View) ILM-Vendor-MFR (View) ILM-HwSw Code (View) ILM-OEM Parts (View) ILM-Status Codes (View) ILM-Status Contract (View) ILM-Sites (View) ILM-Inventory Location (View) ILM-Inventory Location (View) ILM-MWO (Change) ILM-MWO Line Item (Change) ILM-License Product (View) ILM-License Entitlement (View) ILM-License (View) ILM-License Mapping (View) ILM-Additional Host (View)
ILMdaacAdmin	Full privileges to all operator and system administrator functions within ILM at a site.	ALL Remedy-ILM related forms.

Table 27.1-2. Remedy-ILM Groups Description (3 of 3)

Group Name	Description	Access
ILMdaacMaint	Maintenance management data update privileges for Local Maintenance Coordinator at the site.	 ↓ ILM-EIN (View) ↓ ILM-EIN Transactions (View) ↓ ILM-Transaction Log (View) ↓ ILM-Vendor-MFR (View) ↓ ILM-HwSw Code (View) ↓ ILM-OEM Parts (View) ↓ ILM-Status Codes (View) ↓ ILM-Maint Contract (View) ↓ ILM-Sites (View) ↓ ILM-Inventory Location (View) ↓ ILM-MWO (Change) ↓ ILM-MWO Line Item (Change) ↓ ILM-License Product (View) ↓ ILM-License Entitlement (View) ↓ ILM-License (View) ↓ ILM-License Mapping (View)
ILMquery	ILM data query privileges only.	 ILM-Additional Host (View) ILM-EIN (View) ILM-EIN Transactions (View) ILM-Transaction Log (View) ILM-Vendor-MFR (View) ILM-HwSw Code (View) ILM-OEM Parts (View) ILM-Status Codes (View) ILM-Maint Contract (View)
		 ILM-Sites (View) ILM-Inventory Location (View) ILM-MWO (View) ILM-MWO Line Item (View) ILM-License Product (View) ILM-License Entitlement (View) ILM-License (View) ILM-License Mapping (View) ILM-Additional Host (View)

27.2 Remedy User Tool Overview

27.2.1 Navigating Remedy User Tool

Invoking Remedy-ILM from a PC

To start Remedy User,

- Click Start → Programs → Action Request System → Remedy User
- Double-click on a Remedy User icon on the desktop, if one exists.

The Remedy User screen displays. Enter user Id and password.

Once logged into Remedy User, user can open a form. To view a list of all available forms, select **File** \rightarrow **Open**, or select the Open icon, the first icon in the toolbar. This display the complete list of forms to which the user have access (see Figure 27.2.1-1).

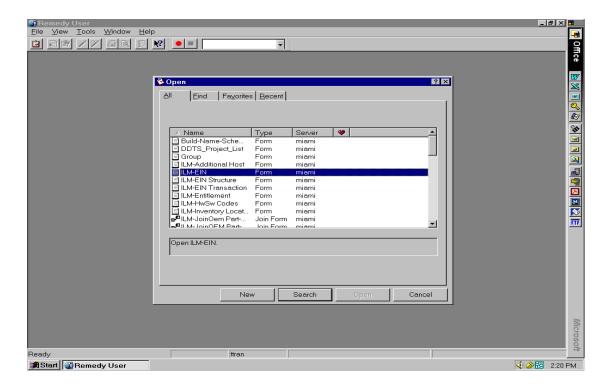


Figure 27.2.1-1. Open GUI

- ◆ To view a shorter list of forms, select the **Find**, **Favorites**, **and Recent** tabs in the Open dialog box.
 - ◆ **Find** Lists only the requested forms.
 - ◆ **Favorites** Lists only the forms designates as favorites.

- ◆ **Recent** Lists only the recently used forms.
- Remedy application is a Graphical User Interface (GUI). The GUI is very similar to any Microsoft application. It has a title bar, menu bar, tool bar, and status bar.
 - ♦ Title Bar Displays form name and mode.
 - ♦ Menu Bar The menus File, Edit, View, Tools, Actions, Window, and Help are stardard AR System menus. Any other menus are those customized for a specific form. For instant, the ILM-EIN form has an additional menu selection calls ILM Reports.
 - ◆ Tool Bar Displays Remedy tool bar icons.
 - ♦ Status Bar Displays form status, logged on user and server name
- ♦ Remedy application is case sensitve. The convention in Remedy-**ILM** is that most of the data are in UPPER CASE One exception is **ECS Name** which holds a host's name. To follow ECS's naming convention, some of the ECS Name will be in lower case and some will be in upper case.
- ◆ Pressing the **<ENTER>** key after each entry **DOES NOT WORK.** Use either the **<**TAB> key or the mouse to move to the next field.
- Each form can be open in one of two modes:
 - ♦ New To create a new record
 - ◆ **Search** To search for an existing record(s).
 - ◆ An easy way to change a form's mode to New or Search is to click the **New Request** or **New Search** icon in the toolbar.
- ♦ Field Labels Convention
 - ♦ Required Fields required fields have labels in **bold type**. Except in cases where field values are added by default or automation, user must enter information in a required field. Otherwise, an attempt to save the request is rejected by the AR system.
 - Optional Fields —Optional fields have labels in regular type. Though this information is not always required to save the record, optional data helps to resolve, track, and reference a record.
 - ◆ System-generated Fields System-generated fields have labels in *italicized type*. User does not enter information in these fields when saving a request, as information in these fields is automatically generated by the system.

27.2.2 Defining Search Criteria

27.2.2.1 Searching by Example

The easiest way to perform a search is to have a form in Search mode, fill one or more specific field values to search for, then click search. Remedy performs the search and displays the matching records. User may specify values for as many fields as needed. The more fields are filled, the more specific the search becomes. Data specified as search criteria is treated as a logical AND. Figure 27.2.2.1-1 displays an example of a search by example. This search will select all records where the manufacturer is SGI, AND the hardware and software code is Hardware (H), AND the Location is GSFC. Table 27.2.2.1-1 describes relational operators that can be used in the query window for Search by Example.

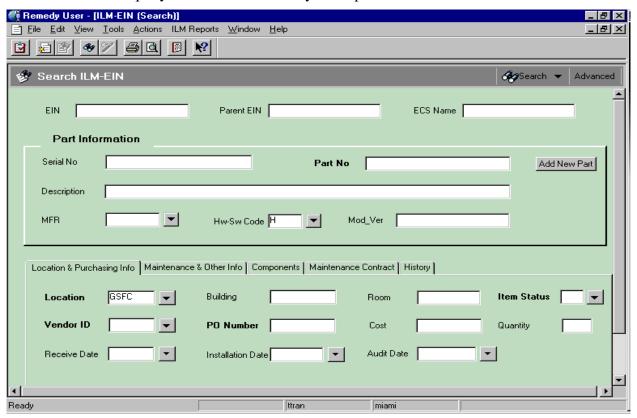


Figure 27.2.2.1-1. Search by Example

Table 27.2.2.1-1. Relational Operators Used in the Query Window

Operator	Action				
<	Matches contents that are <i>less than</i> the value.				
>	Matches contents that are <i>greater than</i> the value.				
! =	Matches centents that are <i>not equal</i> to the value.				
<=	Matches centents that are <i>less than or equal</i> to the value.				
>=	Matches centents that are <i>greater than or equal</i> to the value.				
=	Matches centents that are <i>equal</i> to the value.				

Note: Stopping a Search – While the system is performing the search, user can stop the search by clicking Stop Search in the Active Search dialog.

27.2.2.2 Using the Advanced Search Bar

Using the Advanced Search Bar is a second method of specifying search criteria.

To display the Advanced Search Bar, click on the **Advanced** button in the search form banner, or choose **View -> Advanced Search Bar.** The bar displays at the bottom of the form. With the Advanced Search Bar method, the search criteria are defined in a statement, rather than in field value examples. The basic syntax for building a statement is:

Field_Label Relational_Operation Field_Value

- ◆ Field_Label must be enclosed with single quote (').
- ◆ Field_Value must be enclosed with double quote (").

1. Enter a Field Label

Use one of the following ways to enter a field label in the Advanced Search Bar:

- ◆ Click on a field label in the form. The field label displays in the Advanced Search Bar, enclosed in single quotes.
- ◆ Select the field name from the **Fields** menu. The name displays in the Advanced Search Bar, enclosed in single quotes.
- In the Advanced Search Bar, type the field label between single quotes.

2. Add a Relational Operator

♦ Click on the appropriate operator from the palette of buttons in the Advanced Search Bar area, or type the operator. Table 27.2.2.2-1 lists and describes the action each operator does. Table 27.2.2.2-2 describes the use of wildcard symbols.

3. Enter a Field Value

The field value can be text, a number, or a keyword (Table 27.2.2.2-3 defines some of Remedy Keywords definition). To add a field value in the Advanced Search Bar, use one of the following methods:

- ◆ Type the field value in the Advanced Search Bar enclosed the value with double quotes.
- ♦ Select the field value from the **Fields** -> **Selection Values** menu.

4. Click on the Search icon or button to start the search.

Once the search criteria are specified, user may display, modify, or generate reports from the results of the search.

Figure 27.2.2.1 illustrates how to use the Advanced Search Bar. This example selects all records where ECS Name contains the word "MOP" anywhere in the ECS Name and location equal to EMOSG.

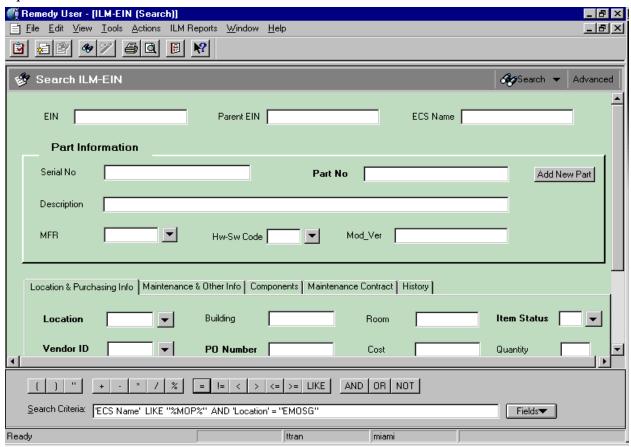


Figure 27.2.2.2-1. Using the Advance Search Bar

Table 27.2.2.1. Operators Used in the Advanced Search Bar

Operator	Action
AND &&	Logical AND of the result of two conditions (the result is true only if both conditions are true). For example, 'MFR' = "SGI" AND 'Location' = "PVC" finds all SGI's equipment locates in PVC. You can use the symbol && instead of the word AND.
OR 	Logical OR of the result of two conditions (the result is true if either conidtion is true). For example, 'MFR' = "SGI" OR 'MFR' = "SUN" finds all SGI and SUN equipment. You can use the symbol instead of the word OR.
NOT !	Negates the condition that follows (if the condition is false, the result is true). For example, NOT 'Room' = "1073" finds all entries that are not in room 1073. You can use the symbol! instead of the word NOT.
LIKE	Performs a pattern search. For example, 'ECS Name' LIKE "g0%" finds all entries where the ECS Name starting with g0.
+	♦ Adds two integer or real values.
	◆ Adds an integer interval to a time value.
	♦ Concatenates two character strings.
-	♦ Subtracts two integer or real values.
	♦ Subtracts two time values.
	◆ Subtracts an integer interval from a time value.
*	Multiples two integer or real values.
/	Divides two integer or real values.
%	Supplies the modulo of two integer values (the remainder of a division of the values).
<	Matches contents that are less than the value.
>	Matches contents that are greater than the value.
!=	Matches centents that are not equal to the value.
<=	Matches centents that are less than or equal to the value.
>=	Matches centents that are greater than or equal to the value.
=	Matches centents that are equal to the value.

Table 27.2.2.2.2. Wildcard Symbols

Wildcard	Action
%	Matches any string of 0 or more characters. For example, 'ECS Name' = "%dms%" matches all ECS Name having dms anywhere in the ECS Name.
_	(Underbar). Matches any single character. For example, B_b matches Bab, Bob, and Bub.
-	(Hyphen). Indicates a range. Always use within brackets ([]).
	Use to match any single character within a specified range or set. For example, [a-f] matches the range of characters a throught f while [abcf] matches the set of characters a, b, c, or f.
[^]	Matches any single character <i>not</i> within a specified range or set. For example, [^a-f] matches all characters except the range a through f while [^abcf] matches all characters except a,b,c or f.

Table 27.2.2.3. Using Keywords

Keyword	Action			
\$DATE\$	Current date.			
\$TIME\$	Current time.			
\$TIMESTAMP\$	Current date and time.			
\$NULL\$	Name of the user who is currently logged in.			
\$USER\$	Lacking a value.			

27.2.3 ILM Predefined Reports

ILM Predefined reports are reports that provide specific ILM information. Table 27.2.3-1 lists and defines these reports. This table also list the section numbers where the instruction to generate these reports can be found.

Table 27.2.3-1. ILM Pre-Defined Reports (1 of 2)

Report Type	Report Description	Table No.			
Inventory Management					
Install/Receipt Report	A receipt describing an operator-specified EIN item together with all of its associated components order by EIN number.	27.3.1.1-2			
Installation Report	A receipt describing an operator-specified EIN item together with its components having status "I" (for installed).	27.3.1.1-2			
Parent EIN Report	Provides a listing of only Parent items.	27.3.1.1-2			
Parent EIN and total System Cost Report	Provides a listing of only Parent items and the total system cost for each Parent.	27.3.1.1-2			
Inventory Report	Provides an ASCII formated report identifying the inventory items by Parent EIN according to the operator-specified criteria.	27.3.1.1-2			
Quarterly Property Management Report	Provides a list of contractor-acquired equipment items by quarter, sorted by Mfr and product description.	27.3.1.1-2			
Purchase Order Cost Report	Provides a list of EINs and their cost associated with an operator-specified purchase order.	27.3.1.1-2			
Cost – Selected ECS Managed Property	Provides the quantity and total cost of operator-selected EINs, grouped by type of inventory (Hardware, Software, Consumable, i.e.).	27.3.1.1-2			
EIN Transaction History	A list of the transactions processed for operator-specified items during an operator-specified timeframe, sorted by EIN number and "from" location	27.3.1.1-2			
Spare Equipment	A list of spare equipment sorted by EIN number.	27.3.1.1-2			
ECS Shipment Report					
Maintenance Managen	nent				
Maintenance Work Order Verification Report					
Maintenance Contract Report	Provides a list of operator-specified maintenance contract and all the associated items the contract covers.				
RMA Work Order Report					

Table 27.2.3-1. ILM Pre-Defined Reports (2 of 2)

Report Type	Report Description	Table No.
License Management		
License Entitlements Status Report	Lists the status of current license entitlements for licensed software products, sorted by software product, version, and license type.	27.5.2-2
License Allocations by Product Report	Lists license allocations for licensed software products, sorted by product, version, and host name.	27.5.3-3
License Allocations by Host Report	Lists license allocations, sorted by host name and ECS part alias.	27.5.3-3

27.3 Property Management

Remedy provides the M&O staffs at the EDF and the DAACs the capability to maintain inventory records, including EIN structures. Property Administrators can submit new records, modify existing ones, and perform transactions that capture installation, relocation, movement, shipment and archive activities. These transactions are logged for historical purposes. The following sections will describe these functions in detail.

27.3.1 ILM-EIN GUI

The ILM-EIN form (Figures 27.3.1-1 through 27.3.1-5) is used for creating, viewing or modifying all ECS inventory records. In addition, this form also allows the Property Administrator to create and modify EIN structures via the Parent EIN field. Other ILM groups may view and perform reports on this form. The following tables provide detail instructions to perform the following functions:

- ♦ Adding New Inventory Item (Table 27.3.1-2)
- ♦ Adding New Component to an EIN structure (Table 27.3.1-3)
- ♦ Modifying EIN record (Table 27.3.1-4)
- ◆ Run ILM-Predefined reports (Table 27.3.1-5)

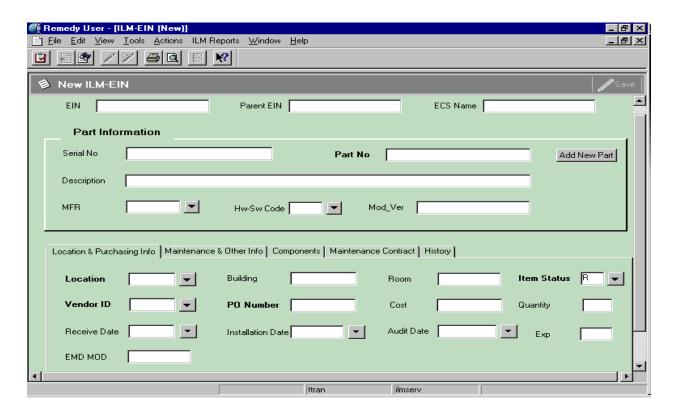


Figure 27.3.1-1. ILM-EIN (Part Info and Location & Purchasing Info) GUI

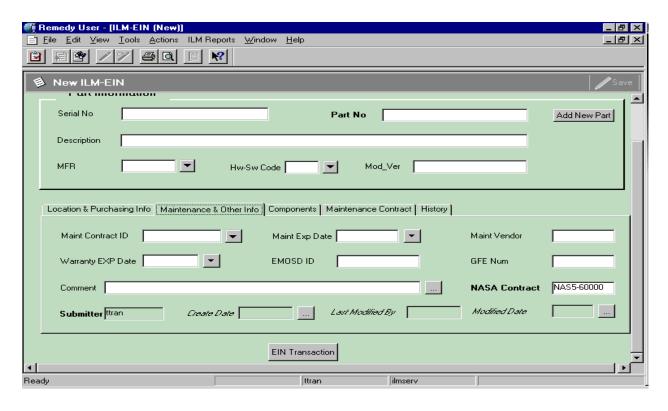


Figure 27.3.1-2. ILM-EIN (Maintenance & Other Info.) GUI

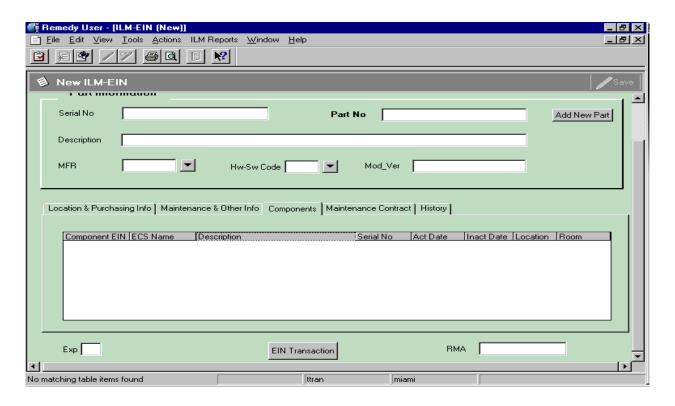


Figure 27.3.1-3. ILM-EIN (Components) GUI

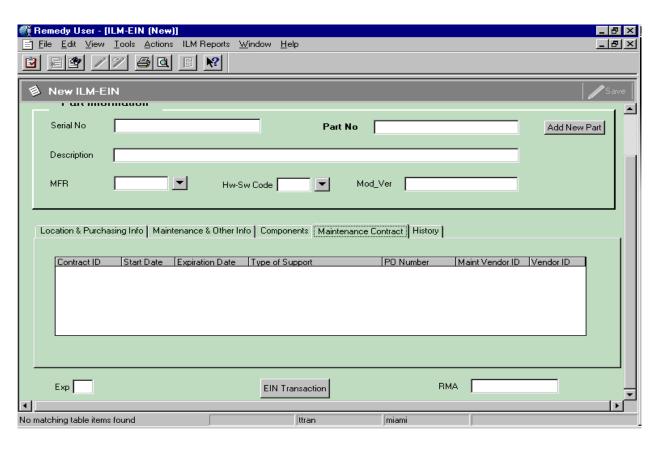


Figure 27.3.1-4. ILM-EIN (Maintenance Contract) GUI

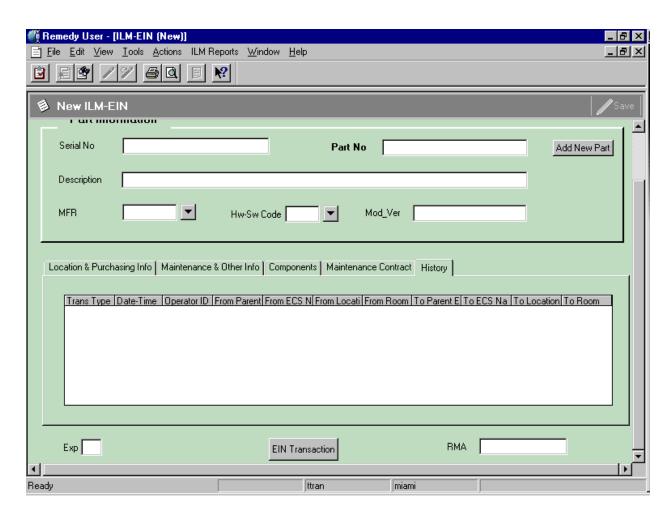


Figure 27.3.1-5. ILM-EIN (History) GUI

Table 27.3.1-1 describes the fields on the ILM- EIN form.

Table 27.3.1-1. ILM-EIN Form Field Description (1 of 2)

Field Name	Data Type	Size	Entry	Description
EIN	Char	20	Optional	Identifier for an inventory item.
Parent EIN	Char	20	Optional	EIN of the host of which this item is a component of.
ECS Name	Char	30	Optional	Name of the machine with which the item is associated.
Serial No	Char	30	Optional	Manufacturer's serial number of the item.
Part No	Char	34	Optional	Manufacturer's or vendor's part number.
Description	Char	60	Optional	Manufacturer's or vendor's description for the item.
Hw-Sw Code	Char	2	Optional	Code for classifying inventory items by type.
MFR	Char	6	Optional	Code used for the manufacturer.
Mod-Ver	Char	24	Optional	Model or version of the item.
Location & Purchasing Info.			Page	Contains the following fields about the EIN item: Location, Building, Room, Item Status, Vendor ID, PO Number, Cost, Quantity, Receive Date, Installation date, and Audit Date.
Location	Char	6	Optional	Identifier that designates an inventory location.
Building	Char	6	Optional	Identifier for the building where the item can be found.
Room	Char	15	Optional	Identifier for the room where the item can be found.
Item Status	Char	2	Optional, default R.	Code that designates the status of the item. The following values are set when processing transactions: R = Received; SP = Spare Equipment; I = Installed; X = Returned to vendor; G = Transfer to Gov; TV = Trade in to Vendor; S = Excess sold to vendor; RG = Relieved from accountability
Vendor ID	Char	6	Required	Code for the Vendor from whom the item was purchased.
PO Number	Char	10	Required	Identifier of the purchase order against which the item was received.
Cost	Decimal	10.2	Optional	Purchase cost of the item.
Quantity	Integer	4	Optional	Number of items purchased on a particular purchase order
Receive Date	Char		Optional	Date item was received from vendor.
Installation Date	Date		Optional	Date the item was installed. The system sets the value during EIN Installation processing.
Audit Date	Date		Optional	Date the item was physically inventoried last
EMD_MOD	Char	15	Optional	EMD Modification number.

Table 27.3.1-1. ILM-EIN Form Field Description (2 of 2)

Field Name	Data Type	Size	Entry	Description
Maintenance & Other Info.			Page	Contains the following fields about the EIN item: Maint Contract ID, Maint Exp Date, Maint Vendor, Warranty Exp Date, EMOSD ID, GFE Num, Comment, NASA Contract, Submitter, Create Date, and Last Modified By.
Maint Contract ID	Char	10	Optional	Identifier for the Maintenance Contract under which the item is covered.
Maint Exp Date	Date		Optional	Date the maintenance contract will expire. This field reflects the Expiration Date from the Maint Contract ID entered above.
GFE NUM	Char	8	Optional	Identifier assigned by the Government to an item of government furnished equipment.
EMOSD ID	Char	15	Optional	Identifier assigned by the EMOS Denver to an inventory item.
Comment	Char	120	Optional	Miscellaneous information specific to the item.
NASA Contract	Char	11	Optional, default NAS5- 60000	Identifier designating the government contract used for this item.
Submitter	Char	30	System- supplied	The user whom created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user last modified the record.
Modify Date	Date		System- supplied	The last date the system was modified.
Components			Page	Page for displaying the components of a parent EIN. It displays the Component EIN, ECS Name, description, Serial No, Active Date, Inactive Date, Location, and Room.
Maintenance Contract			Page	Page displays attributes of the maintenance contract, such as Contract ID, Start Date, Expiration Date, Type of support, PO number, maintenance vendor, and vendor ID.
History			Page	Contains a listing of EIN transaction history for the EIN. This table displays the following fields describing the transactions: Trans Type, Date-Time, Operator ID, From Parent EIN, From ECS Name, From Location, From Room, To Parent EIN, To ECS Name, To Location, and To Room.

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The following buttons are unique to this form:

- Add New Part Activates the ILM-OEM Part form. This allows the operator to add new parts or to search for existing parts.
- EIN Transaction brings up the ILM-EIN Transaction form. See section 27.3.3 for detail information about this form.

Table 27.3.1-2. Add New Inventory Item

Perform	Action	Expected Result
Navigate to the ILM- EIN Form	At the Remedy-ILM PC, ◆ Start- > Programs -> Action Request System -> Remedy User ◆ File -> Open -> ILM-EIN -> New	ILM-EIN form is displayed and ready for the user to add a new EIN record.
Defining new inventory item.	 Fill in the necessary information: ◆ EIN: Enter the EIN number. If the item is an external hardware and has a silver sticker number, enter this number. If not, leave this field blank. ◆ Parent EIN: enter Parent EIN. Leave this field blank if the item is not a component to an EIN Structure. Note: Only structure hardware. ◆ Complete the Part information section. Note. The Part No field's label is Bolded. Therefore, you must enter a value into the Part No field. The Part No must exist in the ILM-OEM Part form. If not, the system will display an error message and will not except the value. If Part No not exist, click Add New Part button and add the part information. ◆ Complete the Location & Purchasing Info section. Note: The following fields are bolded: Location, Item Status, Vendor ID, 	 When the Parent EIN is entered, the system will populate the following fields using the data derived from the Parent EIN record: ECS Name, Location, Building, Room, Vendor ID, PO Number, Item Status, Receive Date. If there is a value in the Parent EIN field, the system adds the EIN as a component to the Parent EIN Structure in the ILM-EIN Structure form using the current date as the active date. When the Part No is entered and the Part No exist in the ILM-OEM Part form, the system will populate the following fields: Description, MFR, Hw-Sw Code and Mod_Ver. If the EIN field is blank, the system will generate the next prefixed C number after the record is saved.
	 and PO Number. Therefore, you must enter values in all of these fields in order to save the record. If not, the system will display an error message stating that all required fields must be completed and will not save the record. Complete the Maintenance & Other Info section. 	The newly created EIN number is displayed in the Status bar on the bottom left of the form.
	 Click on the Save icon on the tool bar to save the record. 	

Table 27.3.1-3. Modifying EIN Record

Perform	Action		Expected Result
Navigate to the ILM-	At the Remedy-ILM PC,	*	ILM-EIN form is displayed and ready
EIN Form	♦ File -> Open -> ILM-EIN -> Search		for the user to add a new EIN record.
	 Perform a Search for the records to be modified. 		
Modify ECS Name	♦ Find the EIN of interest.	•	The system updates the ECS Name
	♦ Enter the ECS Name.		for the EIN and all of its active
	Warning : To maintain data consistency in the database, the system will not allow users to update the ECS Name of components.		components.
	◆ Click on the Save icon on the tool bar.		
Modify the Audit	♦ Find the EIN of interest.	•	The system updates the EIN's audit
Date	◆ Enter the new Audit Date.		date as well as all the active C
	♦ Click on the Save icon on the tool bar.		Number components audit date.

27.3.1.1 ILM-EIN Predefined Reports

Table 27.3.1.1-1 lists a set of special report designed specifically for the ILM-EIN form. These reports are built in Crystal Report Writer. Table 27.3.1.1-1 describes the purpose each of the reports serves. Table 27.3.1.1-2 provides instruction on how to run these reports. The sections that follow present the report layouts.

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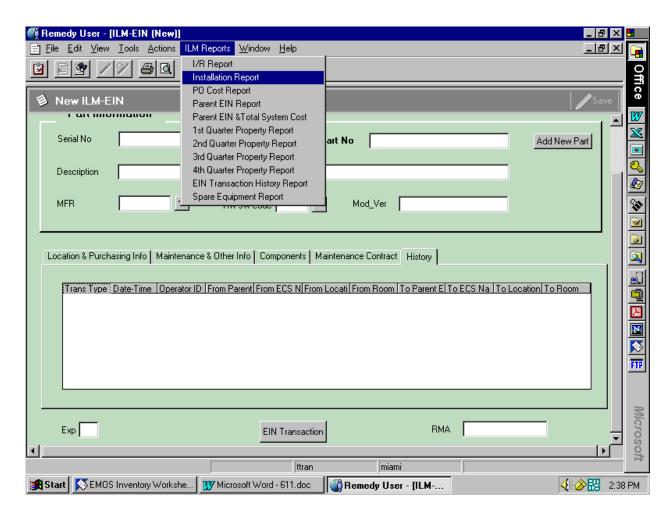


Figure 27.3.1.1-1. ILM-EIN Reports GUI

Table 27.3.1.1-1. ILM-EIN Pre-Defined Reports

Report Type	ort Type Report Description	
Install/Receipt Report	nstall/Receipt Report A report describing an operator-specified EIN item together with all of its associated components order by EIN number.	
Installation Report	Installation Report A report describing an operator-specified EIN item together with its components having status "I" (for installed).	
Purchase Order Cost Report	Provides a list of EINs and their cost associated with an operator-specified purchase order.	27.3.1.1-8
Parent EIN Report	Provides a listing of only Parent items.	27.3.1.1-9
Parent EIN and total System Cost Report	Provides a listing of only Parent items and the total system cost for each Parent.	27.3.1.1-10
Inventory Report	Provides an ASCII formated report identifying the inventory items by Parent EIN according to the operator-specified criteria.	27.3.1.1-11
Quarterly Property Management Report	Provides a list of contractor-acquired equipment items by quarter, sorted by Mfr and product description.	27.3.1.1-12
Cost – Selected ECS Managed Property	Provides the quantity and total cost of operator-selected EINs, grouped by type of inventory (Hardware, Software, Consumable, i.e.).	27.3.1.1-13
EIN Transaction History	A list of the transactions processed for operator-specified items during an operator-specified timeframe, sorted by EIN number and "from" location	27.3.1.1-14
Spare Equipment Report	Provides a list of spare equipment for a selected site or system-wide.	27.3.1.1-15

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Table 27.3.1.1-2. Procedures to Generate ILM-EIN Predefined Reports (1 of 4)

Perform	Action		Expected Result
Navigate to the ILM-	At the Remedy-ILM PC,	*	ILM-EIN form is displayed.
EIN Form	♦ File -> Open -> ILM-EIN -> Search		
Run Install/Receipt Report	◆ Find the Parent EIN of Interest by doing a search in the Parent EIN field.	•	The Install/Receipt Report is displayed. Refer to Figure 27.3.1.1-
	♦ When the records are displayed,		6 for the report layout.
	ILM Reports -> I/R Report		
	When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon.		
	◆ Close the report preview.		
Run Installation Report	 Find the Parent EIN of Interest by doing a search in the Parent EIN field. 	•	The Installation Report is displayed. Refer to Figure 27.3.1.1-7 for the
	♦ When the records are displayed,		report layout.
	ILM Reports -> Installation Report		
	When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon.		
	♦ Close the report preview.		
Run Purchase Order Cost Report	 Find the Purchase Order of Interest by doing a search in the PO Number field. 	*	The Purchase Order Cost Report is displayed. Refer to Figure 27.3.1.1-8
	♦ When the records are displayed,		for the report layout.
	ILM Reports -> PO Cost Report		
	When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon.		
	♦ Close the report preview.		

Table 27.3.1.1-2. Procedures to Generate ILM-EIN Predefined Reports (2 of 4)

Perform	Action	Expected Result
Run Parent EIN Report	 ILM Reports -> Parent EIN Report When the ILM-DIA Reports form is displayed (see Figure 27.3.1.1-2), select or enter a site name to run the report. Leaving the Site value blank will select all Parent EINs. When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. Close the report preview. 	◆ The Parent EIN report is displayed. Refer to Figure 27.3.1.1-9 for the report layout.
Run Parent EIN & Total System Cost Report	 ◆ ILM Reports -> Parent EIN & Total System Cost Report ◆ When the ILM-DIA Reports form is displayed (see Figure 27.3.1.1-2), select or enter a site name to run the report. Leaving the Site value blank will select all Parent EINs. ◆ When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. ◆ Close the report preview. 	◆ The Parent EIN & Total System Cost report is displayed. Refer to Figure 27.3.1.1-10 for the report layout.

Table 27.3.1.1-2. Procedures to Generate ILM-EIN Predefined Reports (3 of 4)

Perform	Action	Expected Result
Run Inventory Report Note: This report is not listed under ILM Report. It's located in the Remedy's Report Style listing.	 ◆ Search for the records of interest to perform the report on. ◆ When the records are displayed, make sure to un-select the highlighted record by pressing the CtrI and single click the highlighted item simutaneously. ◆ Tools -> Reporting -> Inventory Rpt -> Report -> Export To -> File ◆ When the Report to File GUI (see Figure 27.3.1.1-3) is displayed. Select the appropriate directory to save the report in Enter a report file name Save as Type = All File (*.*) Warning: The report will not work if the Save as Type is anything else other than All File.	The inventory report is displayed in Excel. User may make any necessary adjustment to this report. Please refer to MS Excel help for any question on how to use MS Excel. Refer to Figure 27.3.1.1-11 for the report layout.
Run (1 st , 2 nd , 3 rd , or 4 th) Quarterly Property Management Report	 ILM Reports -> (1st, 2nd, 3rd, or 4th) Quarterly Property Report When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. Close the report preview. 	◆ The Quarterly Property Management report is displayed. Refer to Figure 27.3.1.1-12 for the report layout.

Table 27.3.1.1-2. Procedures to Generate ILM-EIN Predefined Reports (4 of 4)

Perform	Action		Expected Result
Run Cost-Selected ECS Managed Report Note: This report is not listed in the ILM Reports listing. It's locates in the Remedy's Report Style.	 ◆ Search for the records of interest to perform the report. ◆ When the records are displayed, make sure to un-select the highlighted record by pressing the Ctrl and single click the highlighted item simutaneously. ◆ Tools -> Reporting -> Cost - ECS Managed Property -> Report -> Preview ◆ When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. ◆ Close the report preview. 	•	The Cost-Selected ECS Managed Report is displayed. See Figure 27.3.1.1-13 for report layout.
Run EIN Transaction History Report		•	The EIN Transaction History report is displayed. See Figure 27.3.1.1-14 for report layout.
Run Spare Equipment Report	 ILM Reports -> Spare Equipment Report When the ILM-DIA Reports form is displayed (see Figure 27.3.1.1-2), select or enter a site name to run the report. Leaving the Site value blank will select all the spare equipment in the database. When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. Close the report preview. 	•	The Spare Equipment report is displayed. See Figure 27.3.1.1-15 for report layout.

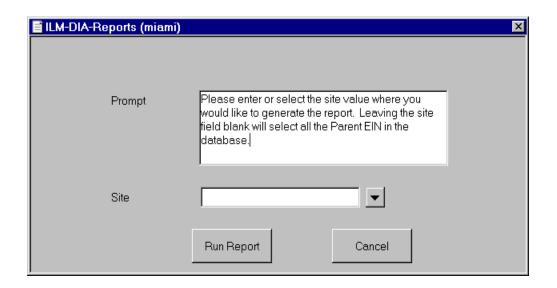


Figure 27.3.1.1-2. ILM-DIA Reports GUI

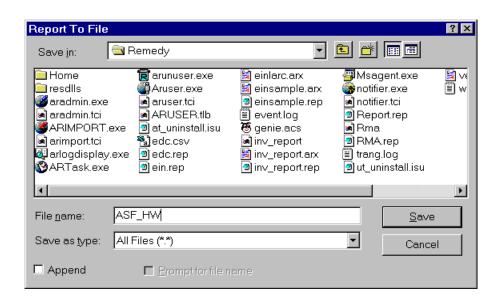


Figure 27.3.1.1-3. Report To File GUI

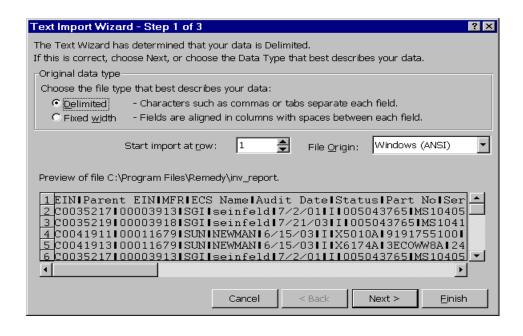


Figure 27.3.1.1-4. Text Import Wizard GUI

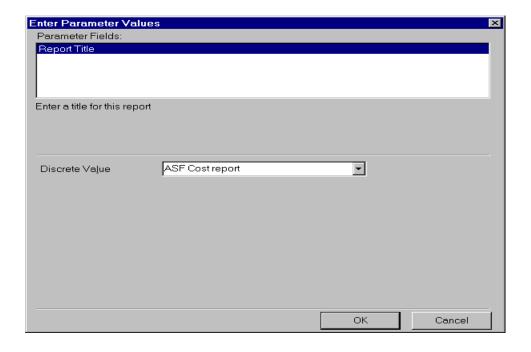


Figure 27.3.1.1-5. Enter Parameter Values GUI

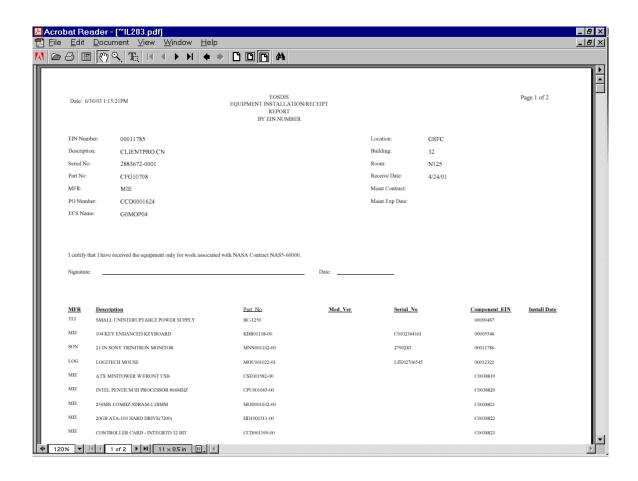


Figure 27.3.1.1-6. Install/Receipt Report GUI

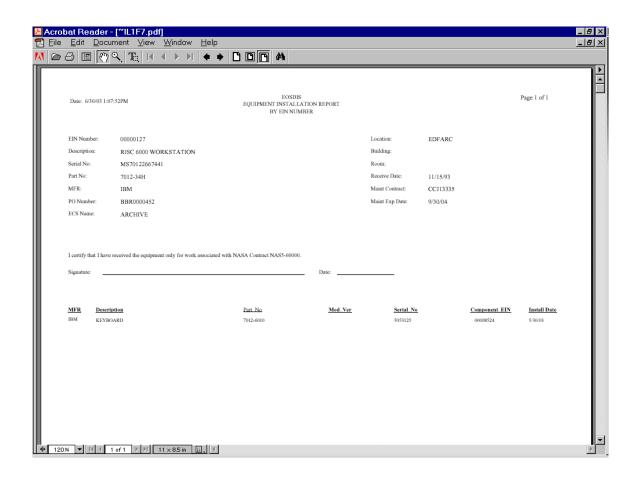


Figure 27.3.1.1-7. Installation Report GUI

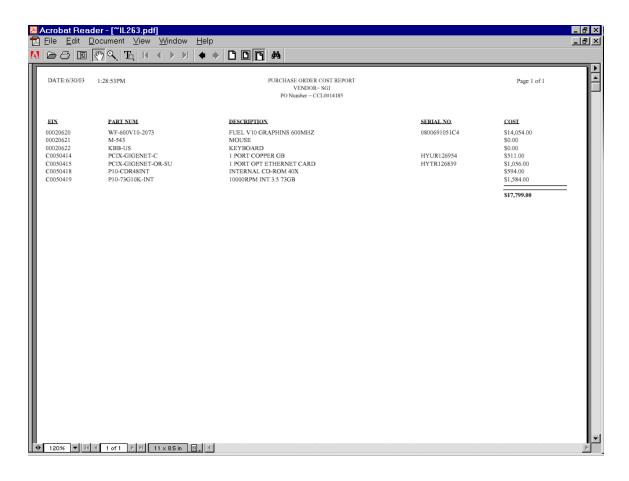


Figure 27.3.1.1-8. Purchase Order Cost Report GUI

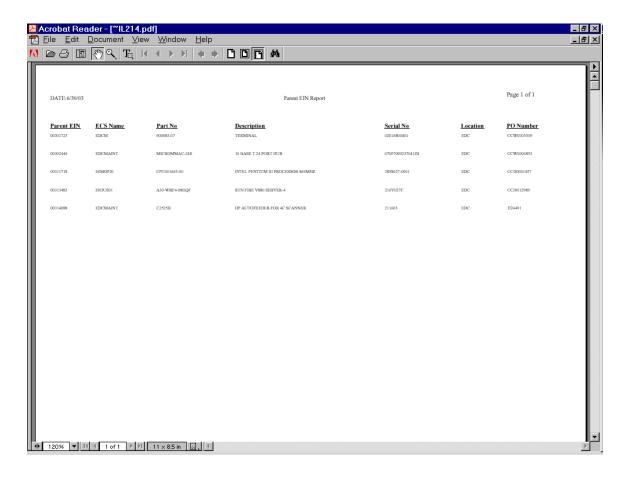


Figure 27.3.1.1-9. Parent EIN Report GUI

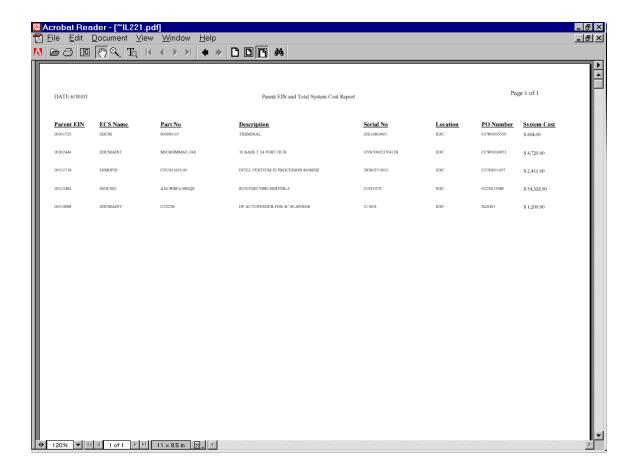


Figure 27.3.1.1-10. Parent EIN & Total System Cost Report GUI

Parent EIN Part EIN	N Mfr	ECS Name	Audit Date S	Audit Date Stat Part Num	Serial Num	Unit Cost	Unit Cost Product Description	Location	Bldg Ro	Room Code	PO Num	Date Rec'd Vendor	ndor
00001838 00001838		SUN n0dms04	2/6/02	A12-UBA1-1E- 645F0AA4 064AB	:- 645F0AA4	\$8,797.00	\$8,797.00 Ultra 1 System	NSIDC	NSIDC 209	I	CCW0005354	12/2/96 SUN	z
00001838 00001891	1891 SUN	n0dms04	2/6/02	X5203A	645G0830	\$1,035.00	\$1,035.00 UniPak - 4.2 GB 5400 RPM FW SCSI-2	NSIDC	NSIDC 209	н	CCW0005354	12/18/96 SUN	z
00001838 00003491	3491 SUN	n0dms04	2/6/02	X267A	9843KN4545	\$5,000.00	\$5,000.00 Color Monitor - 20 IN	NSIDC	NSIDC 209	н	CCW0005354	12/2/96 SUN	z
00001838 00006793		SUN n0dms04	2/6/02	NE SUN1	LZB64001097	\$0.00	\$0.00 Mouse - 3 Button Track Ball	NSIDC	NSIDC 209	н	CCW0005354	12/2/96 SUN	z
00001838 00006794	3794 SUN	n0dms04	2/6/02	320-1233-02	9626371319	\$0.00	\$0.00 Keyboard	NSIDC	NSIDC 209	Н 6	CCW0005354	12/2/96 SUN	z
00001838 C0006	C0009132 SUN	SUN n0dms04	2/6/02	X1025A	12603	\$1,500.00	\$1,500.00 FDDI SINGLE ATTACH SBUS CARD	NSIDC	NSIDC 209	Η 6	CCW0005354	12/2/96 SUN	z
00001838 C0006	C0009133 SUN	SUN n0dms04	2/6/02	X132P	501282278476 877	\$0.00	\$0.00 Memory - 32MB RAM Expansion (1x32	NSIDC	NSIDC 209	П	CCW0005354	12/2/96 SUN	z
00001838 C0006	C0009134 SUN n0dms04	n0dms04	2/6/02	X132P	501262278476 942	\$0.00	\$0.00 Memory - 32MB RAM Expansion (1x32	NSIDC	NSIDC 209	Η	CCW0005354	12/2/96 SUN	z
00001838 C0009	C0009135 SUN n0dms04	n0dms04	2/6/02	X3500A		\$0.00	\$0.00 Country Kit	NSIDC	NSIDC 209	Н 6	CCW0005354	12/2/96 SUN	z
	C0009136 SUN n0dms04	n0dms04	2/6/02	X6001A	9625201083	\$90.00	\$90.00 Floppy Drive - 3.5 IN Disk Drive-1	NSIDC	NSIDC 209	Н 6	CCW0005354	12/2/96 SUN	z
		SUN n0dms04	2/6/02	X6153A	9647723061	\$240.00	CD ROM - Internal SUNCD 4	NSIDC	NSIDC 209		CCW0005354	12/2/96 SUN	z
		SUN n0dms04	2/6/02	370-2286-01	9643604099	\$0.00	\$0.00 Hard Drive - Internal for X5204A	NSIDC	NSIDC 209		CCW0005354	12/18/96 SUN	z
00001838 C0045377	5377 SUN	SUN n0dms04	6/25/02	X5237A	0145KP6EMS	\$479.20	\$479.20 ULTRA SCSI DISK DRIVE, 18GB INTERN	NSIDC	NSIDC 209	Н 6	CCD0002848	11/27/01 SUN	z
	C0149507 SUN n0dms04	n0dms04	1/27/99	SOLD-C		\$45.00	\$45.00 Solaris Media for Servers	NSIDC	NSIDC 209	S 6	CCW0005354	12/2/96 SUN	z
00001839 00001839	1839 SUN	SUN n0mos20	2/6/02	A12-UBA1-1E- 645F0B2C 064AB	E- 645F0B2C	\$8,797.00	\$8,797.00 Ultra 1 System	NSIDC	NSIDC 252		CCW0005354	12/2/96 SUN	z
00001839 00001890		SUN n0mos20	2/6/02	X5203A	645G0868	\$1,035.00	\$1,035.00 UniPak - 4.2 GB 5400 RPM FW SCSI-2	NSIDC	NSIDC 252	7 H	CCW0005354	12/18/96 SUN	z
		SUN n0mos20	2/6/02	X267A	9647GI3704	\$5,000.00	\$5,000.00 Color Monitor - 20 IN	NSIDC	NSIDC 252	2 H	CCW0005354	4/3/00 SUN	z
00001839 00006771		SUN n0mos20	2/6/02	320-1233-02	9626371388	\$0.00	\$0.00 Keyboard	NSIDC	NSIDC 252	2 H	CCW0005354	12/2/96 SUN	z
		SUN n0mos20	2/6/02	NE SUN1	LZB64001084	\$0.00	\$0.00 Mouse - 3 Button Track Ball	NSIDC	NSIDC 252	2 H	CCW0005354	12/2/96 SUN	z
		SUN n0mos20	2/6/02	370-2040-03	9643547711	\$0.00	Hard Drive - 2.1 GB Internal	NSIDC	NSIDC 252	2 H	CCW0005354	12/2/96 SUN	z
		n0mos20	2/6/02	X1025A	11748	\$1,500.00	FDDI SINGLE ATTACH SBUS CARD	NSIDC		5 H	CCW0005354	12/2/96 SUN	z
	9140 SUN	n0mos20	2/6/02	X132P	501262279495 644	\$0.00	Memory - 32MB RAM Expansion (1x32	NSIDC	NSIDC 252	5 H	CCW0005354	12/2/96 SUN	z
00001839 C0006	C0009141 SUN n0mos20	n0mos20	2/6/02	X132P	501262279495 714	\$0.00	\$0.00 Memory - 32MB RAM Expansion (1x32	NSIDC	NSIDC 252	I	CCW0005354	12/2/96 SUN	z
00001839 C0009	C0009142 SUN n0mos20	n0mos20	2/6/02	X3500A		\$0.00	\$0.00 Country Kit	NSIDC	NSIDC 252	7 H	CCW0005354	12/2/96 SUN	z
	C0009143 SUN n0mos20	n0mos20	2/6/02	X6001A	9625201087	\$90.00	\$90.00 Floppy Drive - 3.5 IN Disk Drive-1	NSIDC	NSIDC 252	2 H	CCW0005354	12/2/96 SUN	z
	C0009144 SUN n0mos20	n0mos20	2/6/02	X6153A	6Y50C01029	\$240.00	\$240.00 CD ROM - Internal SUNCD 4	NSIDC		2 H	CCW0005354	12/2/96 SUN	z
		SUN n0mos20	2/6/02	370-2286-01	9643604145	\$0.00	\$0.00 Hard Drive - Internal for X5204A	NSIDC		2 H	CCW0005354	12/18/96 SUN	z
		n0mos20	2/6/02	501-2961	017403	\$0.00	System Board	NSIDC	NSIDC 252		CCW0005354	4/16/01 SUN	z
00001839 C0149508	9508 SUN	n0mos20	1/27/99	SOLD-C		\$45.00	Solaris Media for Servers	NSIDC	NSIDC 252	S Z	CCW0005354	12/2/96 SUN	z

Figure 27.3.1.1-11. Inventory Report GUI

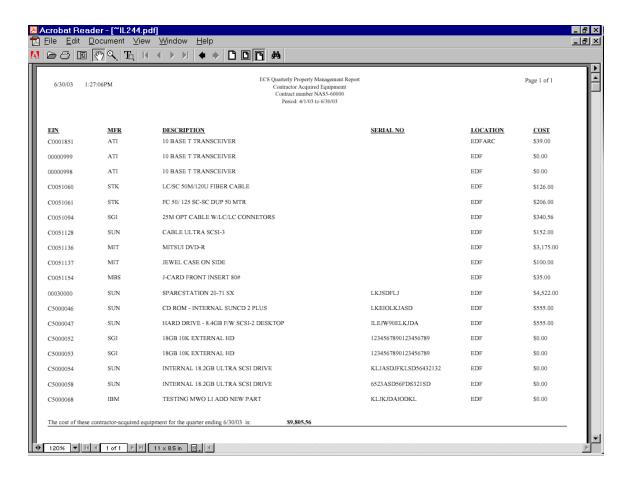


Figure 27.3.1.1-12. Quarterly Property Management Report GUI

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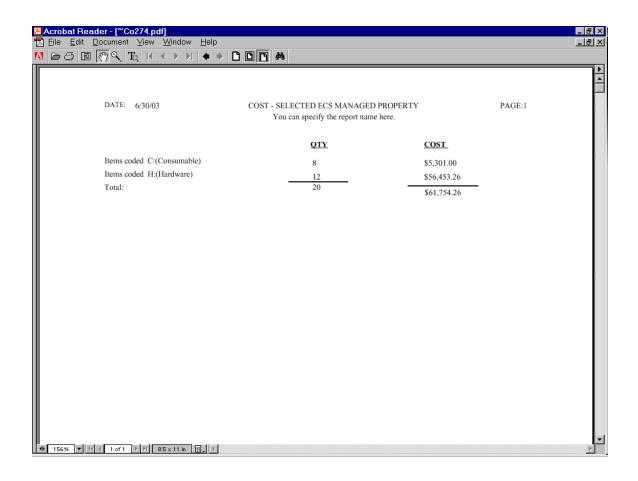


Figure 27.3.1.1-13. Cost – Selected ECS Managed Report GUI

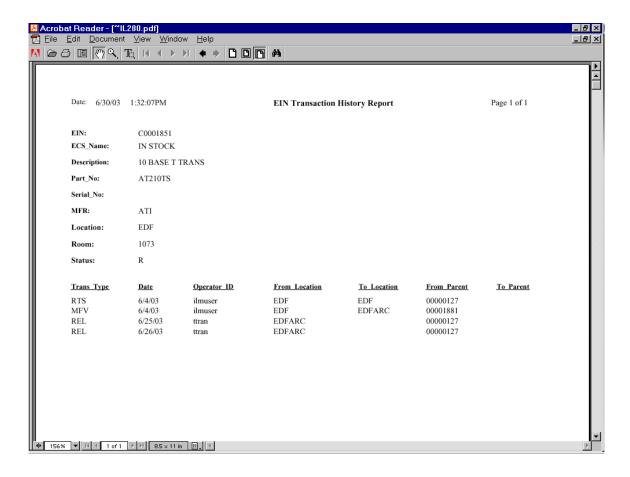


Figure 27.3.1.1-14. EIN Transaction History Report

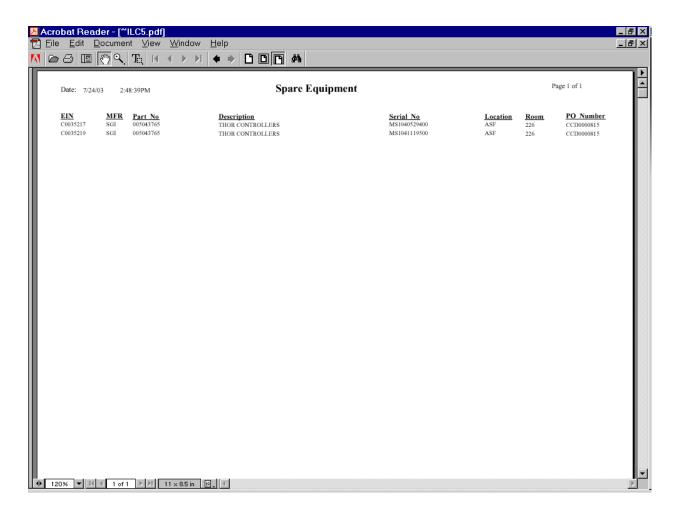


Figure 27.3.1.1-15. Spare Equipment Report GUI

27.3.2 ILM-EIN Structure GUI

The ILM-EIN Structure form (Figures 27.3.2-1 and 27.3.2-2) is designed to allow an Administrator to repair EIN structure records. Other ILM groups may view EIN Structure via the ILM-EIN form discussed in the previous section. To make changes to EIN Structures use the ILM-EIN Transaction form discussed in the next section.

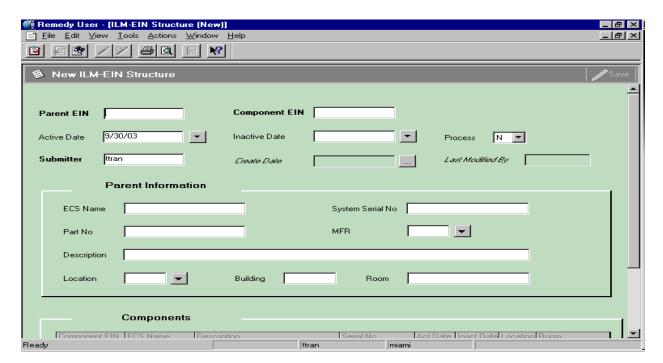


Figure 27.3.2-1. ILM-EIN Structure GUI (1 of 2)

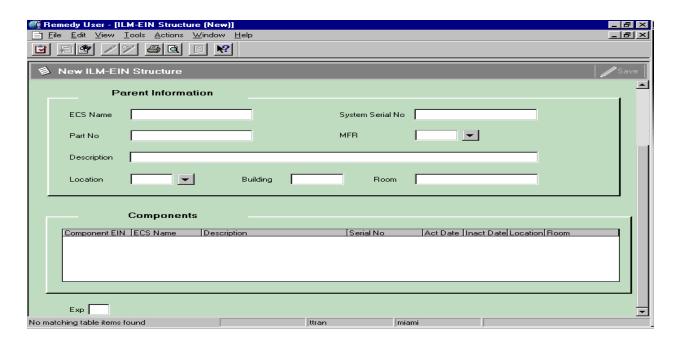


Figure 27.3.2-2. ILM-EIN Structure GUI (2 of 2)

Table 27.3.2-1 contains description of the ILM-EIN Structure form fields.

Table 27.3.2-1. ILM-EIN Structure Field Descriptions

Field Name	Data Type	Size	Entry	Description
Parent EIN	Char	20	Required	EIN for the parent item in an EIN structure.
ECS Name	Char	30	System- supplied	Name of the machine with which the item is associated.
System Serial No	Char	30	System- supplied	Serial number of the item.
Part No	Char	34	System- supplied	Manufacturer's part number.
Description	Char	60	System- supplied	Manufacturer's or vendor's description for the item.
MFR	Char	6	System- supplied	Code for the manufacturer of the item.
Location	Char	6	System- supplied	Identifier that designates an inventory location.
Building	Char	6	System- supplied	The building where the item can be found.
Room	Char	15	System- supplied	The room where the item can be found.
Component EIN	Char	20	Required	Identifier for an EIN controlled inventory item.
Active Date	Date		Required	Date the item was added to the parent structure.
Inactive Date	Date		Optional	Date the component is no longer assigned to the Parent EIN.
Process	Char	1	Optional	Identifier for Component EIN to be processed by EIN transactions.
Components	Table field		System- supplied	Field for displaying the components of a parent EIN. This table contains the following fields describing the Component EIN: Component EIN, ECS Name, Description, Serial No, Active Date, Inactive Date, Location, and Room.

27.3.3 ILM-EIN Transaction GUI

The ILM-EIN Transaction form (Figures 27.3.3-1 through 27.3.3-3) lets the operator perform the following EIN transactions for inventory items: Installation, Relocation, Return to Stock, Movement, Shipment, and Archive. The operator may select the type of transaction from the drop down list on the Transaction Type field as displayed below. Depending on the type of transaction the operator selects, Remedy will perform inventory updates accordingly. The Operator can specify components to be processed by pressing the "Select Components to Process" button. Remedy then transfer the operator to the ILM-Process Component form to complete the transaction. Table 27.3.3-1 describes the field definitions for this form. Table 27.3.3-2 presents detail instructions on how to perform these transactions and how each of them affects the property records and their EIN structures.

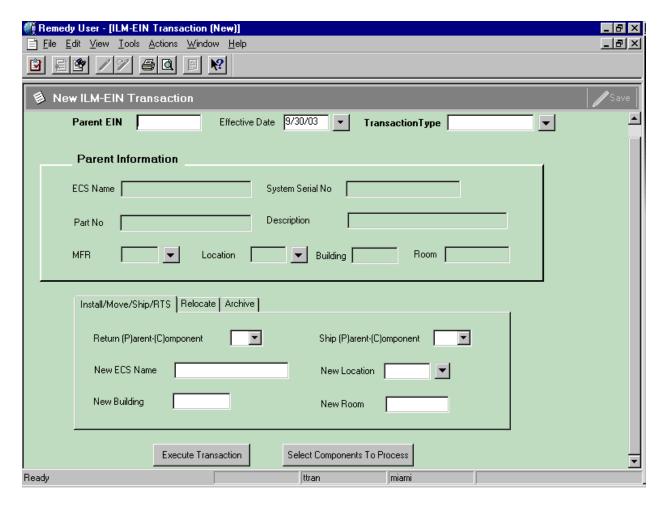


Figure 27.3.3-1. ILM-EIN Transaction GUI (Install/Move/Ship/RTS)

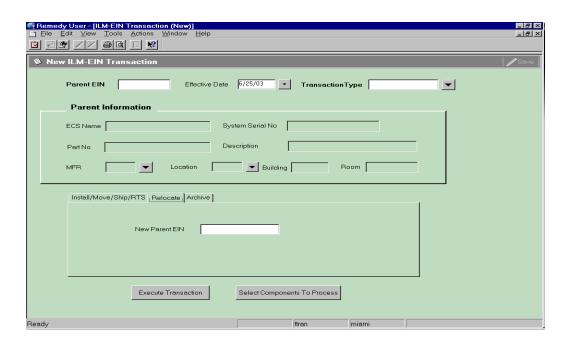


Figure 27.3.3-2. ILM-EIN Transaction GUI (Relocation)

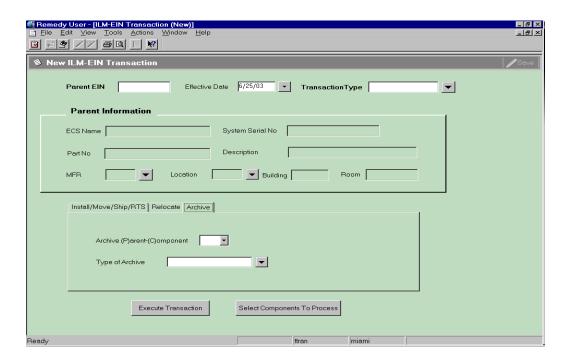


Figure 27.3.3-3. ILM-EIN Transaction GUI (Archive)

Table 27.3.3-1. ILM-EIN Transaction Form Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Parent EIN	Char	20	Required	EIN for the parent item in an EIN structure.
Transaction Type	Char	15	Required	Type of transaction performs on the Parent EIN such as Installation, relocation, movement, shipment, Return To Stock, and archive.
Effective Date	Date		Optional	The date the transaction is in effect.
ECS Name	Char	30	System- supplied	Name of the machine with which the item is associated.
System Serial No	Char	30	System- supplied	Serial number of the Parent EIN.
Part No	Char	34	System- supplied	Manufacturer's or vendor's part number.
MFR	Char	6	System- supplied	Code for the manufacturer of the item.
Description	Char	60	System- supplied	Manufacturer's or vendor's description for the item.
Location	Char	6	System- supplied	Identifier that designates an inventory location.
Room	Char	15	System- supplied	The room where the item can be found.
New ECS Name	Char	30	Optional	New ECS Name for the Parent EIN.
New Location	Char	6	Optional	New Location where the item will be.
New Building	Char	6	Optional	New Building where the item will be.
New Room	Char	15	Optional	New room where the item will be.
Return (P)arent- (C)omponent	Char	1	Optional, P or C	Identify whether the operator will return Parent and all of the components to stock or return some of the components to stock.
Ship (P)arent- (C)omponent	Char	1	Optional, P or C	Identify whether the operator will ship Parent and all of the components or ship some of the components to a new location.
New Parent EIN	Char	20	Optional	New Parent EIN to which the item(s) will be associated with.
Archive (P)arent- (C)omponent	Char	1	Optional, P or C	Identify whether the operator will archive the Parent as well as all the active components or archive a subset of components.
Type of Archive	Char	6	Optional, X, TV,G, RG	Define the type of archive, ie: Return to Vendor – X; Trade in to vendor – TV; Transferred to government – G; Government Relieved Accountability – RG; and Excess sold to vendor = S

Table 27.3.3-1. ILM-EIN Transaction Form Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Install/Move/Ship/ RTS	Page		N/A	This page contains the following fields to perform the EIN Installation, Movement, Shipment, and Return to Stock: Return (P)arent-(C)omponent, Ship (P)arent-(C)omponent, New ECS Name, New Location, New Building, and New Room.
Relocate	Page		N/A	This page contains the New Parent EIN field for user to perform EIN relocation.
Archive	Page		N/A	This page contains the following fields to perform EIN archive: Archive (P)arent-(C)omponent and Type of Archive.

- ♦ Pressing the Execute Transaction will process the transaction and updates inventory items according to the type of transaction the operator selected.
- ♦ Pressing the "Select Components to Process" button will bring up the ILM-Process Component form. This button will be visible only when the transaction is associated with components.

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Table 27.3.3-2. Procedures to Perform EIN Transactions (1 of 8)

Perform	Action	Expected Result
Navigate to the ILM- EIN Transaction	At the Remedy-ILM PC, ◆ File -> Open -> ILM-EIN Transaction-> New	ILM-EIN Transaction form is displayed.
Installing a Parent and all of it component – Installation is designed for updating property records to reflect installation of inventory items.	 Enter Parent EIN into the Parent EIN field Enter the Effective Date Select Installation from the list of Transaction Types Enter New ECS Name, New Location, New Building, and New room Press the Execute Transaction button on the bottom of the form. The ILM-TRS-Dialog form (Figure 27.3.3-4) displayed, asking the user "Would you like to perform another transaction?" and provides the following options: Same Parent EIN Another Parent EIN Exit EIN Transaction Press "Another Parent EIN" button to perform another transaction. 	Remedy performs the following updates for the Parent EIN and all of its active components: • ECS Name = New ECS Name • Location = New Location • Building = New Building • Room = New Room • Item Status = I (Install) • Installation and Audit Date = Effective Date • Writes an "INS" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, and ECS Name and Location values changes.
Moving a Parent and all of its components. EIN Movement is designed for updating property records when a Parent EIN and all of its children are being moved from one room within a site to another. Note: Use Shipment for intersite movement.	◆ Enter Parent EIN into the Parent EIN field	Remedy performs the following updates for the Parent EIN and all of its active components: • ECS Name = New ECS Name • Building = New Building • Room = New Room • Item Status = I (Install) • Installation and Audit Date = Effective Date • Writes an "MV" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, and ECS Name and Location values changes.

Table 27.3.3-2. Procedures to Perform EIN Transactions (2 of 8)

Perform	Action	Expected Result
Shipping a Parent and all of its components	 ◆ Enter Parent EIN into the Parent EIN field ◆ Enter the Effective Date ◆ Select Shipment from the list of Transaction Types ◆ Select P from the Ship (P)arent-(C)omponent field. ◆ Enter New ECS Name, New Location, New Building, and New room ◆ Press the Execute Transaction button on the bottom of the form. ◆ The ILM-TRS-Dialog form (Figure 27.3.3-4) displayed, asking the user "Would you like to perform another transaction?" and provides the following options: Same Parent EIN Another Parent EIN Exit EIN Transaction ◆ Press "Another Parent EIN" button to perform another transaction. 	Remedy performs the following updates for the Parent EIN and all of its active components: ECS Name = New ECS Name Location = New Location Building = New Building Room = New Room Item Status = I (Install) Installation and Audit Date = Effective Date Writes an "SHP" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, and ECS Name and Location values changes.

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Table 27.3.3-2. Procedures to Perform EIN Transactions (3 of 8)

Perform	Action	Expected Result
Shipping Components only	 Enter Parent EIN into the Parent EIN field Enter the Effective Date Select Shipment from the list of Transaction Types Select C from the Ship (P)arent-(C)omponent field. Enter New ECS Name, New Location, New Building, and New room Press the "Select Components To Process" button When the ILM-Join Process Component form (Figure 27.3.3.1-1) is displayed, find the component to be processed listed in the result list. Select Y from the Process field. Press the Save icon. When finished specifying components to process, close the ILM-Join Process Component form. Press the Execute Transaction button on the bottom of the ILM-EIN Transaction form. The ILM-TRS-Dialog form (Figure 27.3.3-4) displayed, asking the user "Would you like to perform another transaction?" and provides the following options: Same Parent EIN Another Parent EIN Exit EIN Transaction Press "Another Parent EIN" button to perform another transaction. 	Remedy performs the following updates for the selected components: Parent EIN = Blank ECS Name = New ECS Name Location = New Location Building = New Building Room = New Room Item Status = R (Receive) Installation date = Blank Audit Date = Effective Date Writes an "SHP" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, and ECS Name, Parent EIN, and Location values changes. Inactivate the selected components from the EIN Structure using the Effective Date as the Inactive date.

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Table 27.3.3-2. Procedures to Perform EIN Transactions (4 of 8)

Perform	Action	Expected Result
Moving Parent and Components to stock	 ◆ Enter Parent EIN into the Parent EIN field ◆ Enter the Effective Date ◆ Select Return To Stock from the list of Transaction Types ◆ Select P from the Return (P)arent-(C)omponent field. ◆ Enter New ECS Name, New Location, New Building, and New room ◆ Press the Execute Transaction button on the bottom of the form. ◆ The ILM-TRS-Dialog form (Figure 27.3.3-4) displayed, asking the user "Would you like to perform another transaction?" and provides the following options: Same Parent EIN Another Parent EIN Exit EIN Transaction ◆ Press "Another Parent EIN" button to perform another transaction. 	Remedy performs the following updates for the Parent EIN and all of its active components: ECS Name = IN STOCK Location = New Location Building = New Building Room = New Room Item Status = R (Receive) Installation Date = BLANK Audit Date = Effective Date Writes an "RTS" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, ECS Name, and Location values changes.

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Table 27.3.3-2. Procedures to Perform EIN Transactions (5 of 8)

Perform	Action	Expected Result
Moving components to stock	 Enter Parent EIN into the Parent EIN field Enter the Effective Date Select Return To Stock from the list of Transaction Types Select C from the Return (P)arent-(C)omponent field. Enter New Location, New Building, and New room Press the "Select Components To Process" button When the ILM-Join Process Component form (Figure 27.3.3.1-1) is displayed, find the component to be processed listed in the result list. Select Y from the Process field. Press the Save icon. When finished specifying components to process, close the ILM-Join Process Component form. Press the Execute Transaction button on the bottom of the ILM-EIN Transaction form. The ILM-TRS-Dialog form (Figure 27.3.3-4) displayed, asking the user "Would you like to perform another transaction?" and provides the following options: Same Parent EIN Another Parent EIN Exit EIN Transaction Press "Another Parent EIN" button to perform another transaction. 	Remedy performs the following updates for the selected components: Parent EIN = Blank ECS Name = IN STOCK Location = New Location Building = New Building Room = New Room Item Status = R (Receive) Installation Date = BLANK Audit Date = Effective Date Writes an "RTS" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, and ECS Name, Parent EIN, and Location values changes. Inactivate the selected components from the EIN Structure using the Effective Date as the Inactive date.

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Table 27.3.3-2. Procedures to Perform EIN Transactions (6 of 8)

Perform	Action	Expected Result
Relocating components to a new EIN Structure	 Enter Current Parent EIN into the Parent EIN field Enter the Effective Date Select Relocation from the list of Transaction Types Enter the new Parent EIN into the New Parent EIN field. Press the "Select Components To Process" button When the ILM-Join Process Component form (Figure 27.3.3.1-1) is displayed, find the component to be processed listed in the result list. Select Y from the Process field. Press the Save icon. When finished specifying components to process, close the ILM-Join Process Component form. Press the Execute Transaction button on the bottom of the ILM-EIN Transaction form. The ILM-TRS-Dialog form (Figure 27.3.3-4) displayed, asking the user "Would you like to perform another transaction?" and provides the following options: Same Parent EIN Another Parent EIN Exit EIN Transaction Press "Another Parent EIN" button to perform another transaction. 	Remedy performs the following updates for the selected components: Parent EIN = New Parent EIN ECS Name = New Parent's ECS Name Location = New Parent's Location Building = New Parent's Building Room = New Parent's Room Item Status = I (Install) Installation and Audit Date = Effective Date Writes an "REL" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, and ECS Name, Parent EIN and Location values changes. Inactivate the selected components from the Old EIN Structure using the Effective Date as the Inactive date. Add the selected components to the New EIN Structure using the Effective Date as the active date.

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Table 27.3.3-2. Procedures to Perform EIN Transactions (7 of 8)

Perform	Action	Expected Result
Archivng a Parent and all of its components	 Enter Parent EIN into the Parent EIN field Enter the Effective Date Select Archive from the list of Transaction Types Select P from the Archive (P)arent-(C)omponent field. Select the type of archive from the list of archive types: Return to Vendor (X) Trade in to Vendor (TV) Excess sold to vendor (S) Transferred to Government (G) Government Relieved from accountability (RG) Press the Execute Transaction button on the bottom of the form. The ILM-TRS-Dialog form (Figure 27.3.3-4) displayed, asking the user "Would you like to perform another transaction?" and provides the following options: Same Parent EIN Another Parent EIN Exit EIN Transaction Press "Another Parent EIN" button to perform another transaction. 	Remedy performs the following updates for the Parent EIN and all of its active components: • ECS Name = ARCHIVE • Location = EDFARC • Building = BLANK • Room = BLANK • Item Status = Depends on type of archive selected. • Installation Date = BLANK • Audit Date = Effective Date • Writes an "ARC" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, and ECS Name and Location values changes.

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Table 27.3.3-2. Procedures to Perform EIN Transactions (8 of 8)

Perform	Action	Expected Result
Archiving components only	 Enter Parent EIN into the Parent EIN field Enter the Effective Date Select Archive from the list of Transaction Types Select C from the Archvie (P)arent-(C)omponent field. Select the type of archive from the list of archive types: Return to Vendor (X) Trade in to Vendor (TV) Excess sold to vendor (S) Transferred to Government (G) Government Relieved from accountability (RG) Press the "Select Components To Process" button When the ILM-Join Process Component form (Figure 27.3.3.1-1) is displayed, find the component to be processed listed in the result list. Select Y from the Process field. Press the Save icon. When finished specifying components to process, close the ILM-Join Process Component form. Press the Execute Transaction button on the bottom of the ILM-EIN Transaction form. The ILM-TRS-Dialog form (Figure 27.3.3-4) displayed, asking the user "Would you like to perform another transaction?" and provides the following options: Same Parent EIN Another Parent EIN Exit EIN Transaction Press "Another Parent EIN" button to perform another transaction. 	Remedy performs the following updates for the selected components: Parent EIN= Blank ECS Name = ARCHIVE Location = EDFARC Building = BLANK Room = BLANK Item Status = Depends on type of archive selected. Installation Date = BLANK Audit Date = Effective Date Writes an "ARC" record in the transaction log to capture details of the event. This includes date/time of the event, operator initiating it, and ECS Name, Parent EIN and Location values changes. Inactivate the selected components from the EIN Structure using the Effective Date as the Inactive date.

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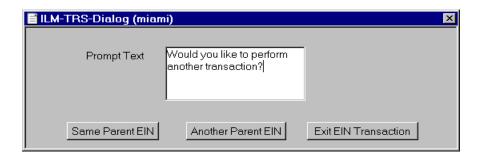


Figure 27.3.3-4. ILM-TRS Dialog GUI

27.3.3.1 ILM-Process Component GUI

The ILM-Process Component form (Figure 27.3.3.1-1) displays all the active components for the Parent EIN entered on the ILM-EIN Transaction form. The User may specify components to be processed by entering a "Y" in the Process field. This form can be accessed through the "Select Components To Process" button on the buttom of the ILM-EIN Transaction form. This button is only visible when the transaction is being performed on components. For example, when the user selects to return components (Return (P)arent-(C)omponent) to stock, or relocate components to a new EIN Structure, or archive components.

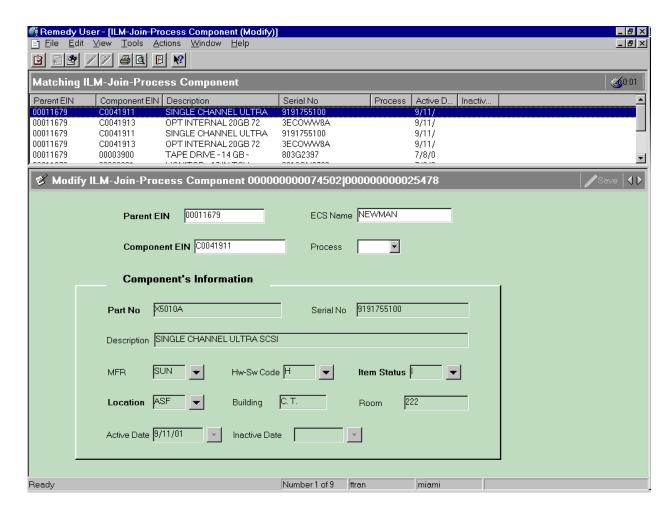


Figure 27.3.3.1-1. ILM-Process Component GUI

Table 27.3.3.1-1 describes the field definitions for the ILM-Process Component Form.

Table 27.3.3.1-1. ILM-Component to Process Field Descriptions

Field Name	Data Type	Size	Entry	Description
Parent EIN	Char	20	System- supplied	EIN for the parent item in an EIN structure.
ECS Name	Char	30	System- supplied	Name of the machine with which the item is associated.
Component EIN	Char	20	System- supplied	EIN for the Component item in an EIN structure.
Process	Char	1	Optional	Indicates whether or not a component is to be processed. Y = Yes, N = No.
Part No	Char	34	System- supplied	Manufacturer's or vendor's part number.
MFR	Char	6	System- supplied	Code for the manufacturer of the item.
Description	Char	60	System- supplied	Manufacturer's or vendor's description for the item.
Serial No	Char	30	System- supplied	Serial number of the item.
Item Status	Char	1	System- supplied	Code that designates the status of the item.
Location	Char	6	System- supplied	Identifier that designates an inventory location.
Room	Char	15	System- supplied	The room where the item can be found.
Active Date	Date		System- supplied	Date the item was added to the parent structure.
Inactive Date	Date		System- supplied	Date the component is no longer assigned to the EIN Structure.

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27.3.4 ILM-Transaction Log

ILM-Transaction Log form (Figures 27.3.4-1 and 27.3.4-2) is designed for viewing/browsing all the EIN transactions performed on property records. Remedy logs the type of transaction, date/time, operator initiating the transaction, ECS name, Parent EIN, and location changes. In addition, this form also shows property record changes due to maintenance actions performed on inventory items (refer to section 27.4).

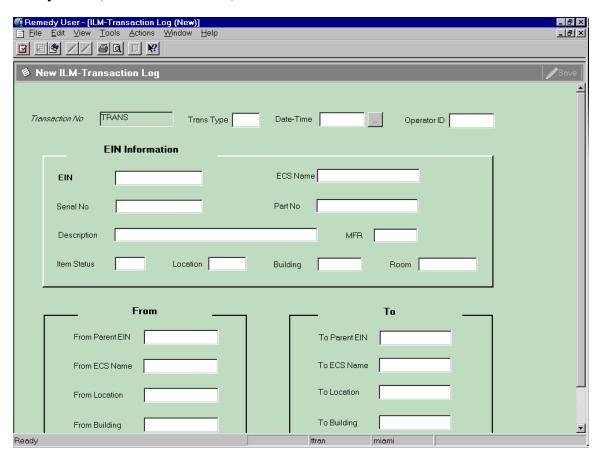


Figure 27.3.4-1. ILM-Transaction Log GUI (1 of 2)

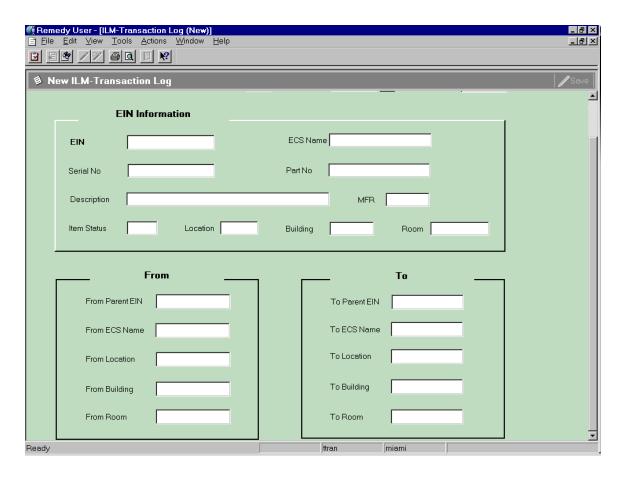


Figure 27.3.4-2. ILM-Transaction Log GUI (2 of 2)

Table 27.3.4-1 describes the fields on the ILM-Transaction form.

Table 27.3.4-1. ILM-Transactions Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Transaction No	Numeric	10	System- supplied	A system generated number that uniquely identifies the transaction.
Trans Type	Char	5	System- supplied	The type of transaction operators perform on an inventory item, including: INS - Install, MVE – Move, REL - Relocate, ARC – Archive, SHP – Ship, RTS – Return to Stock, MFS – Failed and Returned to Stock, MFV – Failed and returned to the vendor, MNS – New and came from stock, MNV – New and came from vendor, MRR – Relocate to a new Parent via the MWO, and MRS – Relocate to stock via the MWO.
Date-Time	Date		System- supplied	Date and time the transaction occurred.
Operator ID	Char	10	System- supplied	The operator id who performed the transaction.
EIN	Char	20	System- supplied	The EIN number that the transaction performed on.
ECS Name	Char	30	System- supplied	Name of the machine with which the item is associated.
Serial No	Char	30	System- supplied	Serial number of the item.
Part No	Char	30	System- supplied	Manufacturer's or vendor's part number.
Description	Char	60	System- supplied	Manufacturer's or vendor's description of the item.
MFR	Char	6	System- supplied	Code for the manufacturer of the item.
Item Status	Char	2	System- supplied	Code that designates the status of the item. The following values are set when processing transactions: R = Received; SP = Spare Equipment; I = Installed; X = Returned to vendor; G = Transfer to Gov; TV = Trade in to Vendor; S = Excess sold to vendor; RG = Relieved from accountability
Location	Char	6	System- supplied	Identifier designates an inventory location.
Building	Char	6	System- supplied	Identifier for the building where the item can be found.
Room	Char	15	System- supplied	Identifier for the room where the item can be found.
From Parent EIN	Char	20	System- supplied	The parent EIN where the EIN originated.
To Parent EIN	Char	20	System- supplied	The new parent EIN where the EIN is locating.

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Table 27.3.4-1. ILM-Transactions Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
From ECS Name	Char	30	System- supplied	The original Name of the machine with which the item is associated.
To ECS Name	Char	30	System- supplied	Name of the machine with which the item is associated.
From Location	Char	6	System- supplied	The original location of the EIN.
To Location	Char	6	System- supplied	The new location of the EIN.
From Building	Char	6	System- supplied	The original building where the EIN was located.
To Building	Char	6	System- supplied	The new building where the EIN is located.
From Room	Char	15	System- supplied	The original room where the EIN was located.
To Room	Char	15	System- supplied	The new room where the EIN is located.

Table 27.3.4-2. Procedures to Generate EIN Shipment Report

Perform	Action	Expected Result
Navigate to the ILM- Transaction Log Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-Transaction Log -> Search	ILM-Transaction Log form is displayed.
Run ECS Shipping Report	 Enter SHP into the Trans Type field. Use the Advance Search Bar to specify the Date-time period to report and click the search button. When the records are displayed, make sure to un-select the highlighted record by pressing the Ctrl and single click the highlighted item simutaneously. Tools - > Reporting - > ECS Shipping Report - > Report - > Preview 	◆ The ECS Shipping Report is displayed. See Figure 27.3.4-3 for the report layout.
	 When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. Close the report preview. 	

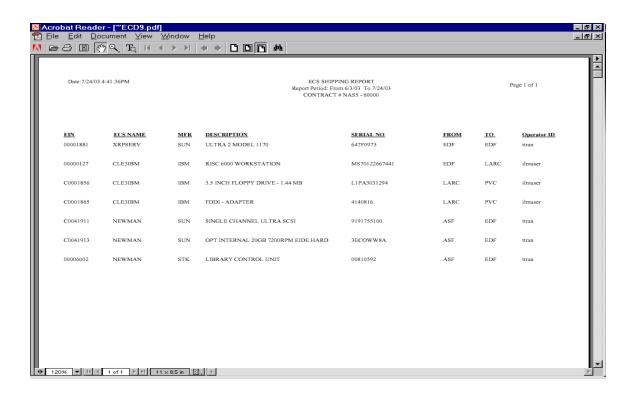


Figure 27.3.4-3. ECS Shipping Report GUI

27.3.5 ILM-OEM Parts

Property Administrator uses the ILM-OEM Parts form (Figure 27.3.5-1) to maintain standardized information about manufacturer's parts. Part information must be recorded before they can be added to an inventory item.

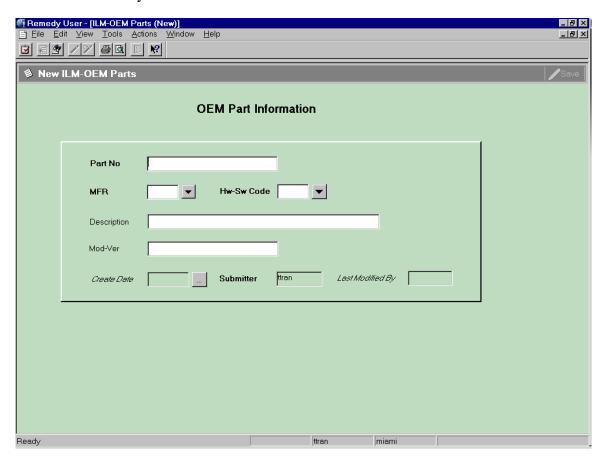


Figure 27.3.5-1. ILM-OEM Parts GUI

Table 27.3.5-1 describes the fields on the ILM-OEM Parts form.

Table 27.3.5-1. ILM-OEM Parts Field Descriptions

Field Name	Data Type	Size	Entry	Description
Part No	Char	34	Required	Manufacturer's or vendor's part number for an item.
MFR	Char	6	Required	Code for the manufacturer of the item. The MFR code must exist in the ILM-Vendor-MFR form.
Hw-Sw Code	Char	2	Required	Code for classifying items according to source of maintenance costs. The Hw-Sw Code must exist in the ILM-HwSw Code Form.
Description	Char	60	Optional	Manufacturer's or vendor's description of the item.
Mod-Ver	Char	24	Optional	Model or version of the item.
Submitter	Char	30	System- supplied	The user whom created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user last modified the record.

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27.3.6 ILM-Vendor-MFR GUI

The ILM-Vendor-MFR form (Figure 27.3.6-1) allows operators to define valid vendor codes for used with EIN records and Oem parts records. The operator enters or modifies the fields for this screen as required (see Table 27.3.6-1).

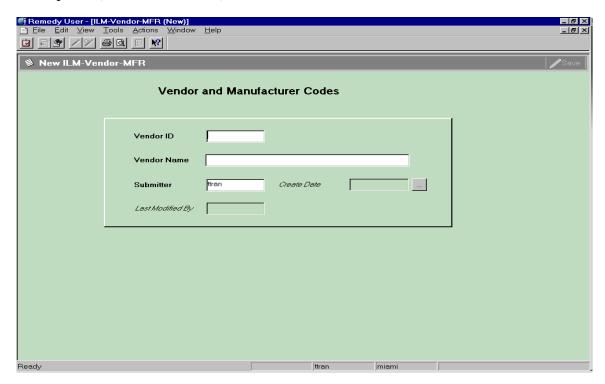


Figure 27.3.6-1. ILM-Vendor-MFR GUI

Table 27.3.6-1 describes the fields on the ILM-Vendor-MFR form.

Table 27.3.6-1. ILM-Vendor-MFR Field Descriptions

Field Name	Data Type	Size	Entry	Description
Vendor ID	Char	6	Required	Code for a vendor from whom items are purchased.
Vendor Name	Char	30	Required	Full name of a vendor from who items are purchased.
Submitter	Char	30	System- supplied	The user whom created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user last modified the record.

27.3.7 ILM-HwSw Codes GUI

Operators use this form (Figure 27.3.7-1) to maintain a standard set of codes for distinguishing items according to source of maintenance costs. These codes are associated with EIN items and are essential for grouping inventory items for reporting and browsing.

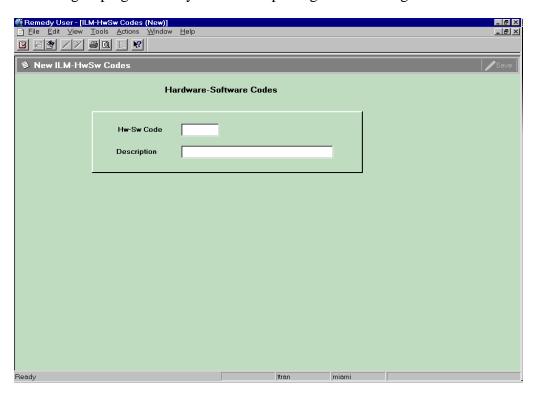


Figure 27.3.7-1. ILM-HwSw Codes GUI

Table 27.3.7-1 describes the fields on the ILM-HwSw Codes form.

Table 27.3.7-1. ILM-HwSw Codes Field Descriptions

Field Name	Data Type	Size	Entry	Description
Hw/Sw Code	Char	2	•	Code for classifying items according to source of maintenance costs.
Description	Char	30	Required	Description for the Hardware/Software code.

27.3.8 ILM-Status Codes GUI

The ILM-Status Codes form (Figure 27.3.8-1) maintains a set of standardized codes for identifying valid inventory item states in the inventory and logistics life cycle.

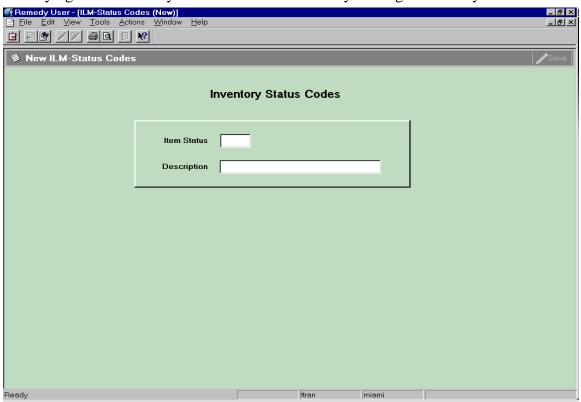


Figure 27.3.8-1. ILM-Status Codes GUI

Table 27.3.8-1 describes the fields on the ILM-Status Codes form.

Table 27.3.8-1. ILM-Status Codes Field Descriptions

Field Name	Data Type	Size	Entry	Description
Item Status	Char	6	Required	Code for an inventory status for an item.
Description	Char	30	Required	Description for the code.

27.3.9 ILM-Maint Contract GUI

The ILM-Maint Contract form (Figures 27.3.9-1 and 27.3.9-2) provides the ability to track information about maintenance contracts with vendors and suppliers. The contract ID is the key field and should be the actual number that purchasing or the vendor assigns. The data entered here supports data entry for the ILM-EIN form (section 27.3.1). User may run a Maintenance Contract report that lists all EIN records that the individual maintenance contract covers. Table 27.3.9-2 provides instruction on how to run this report.

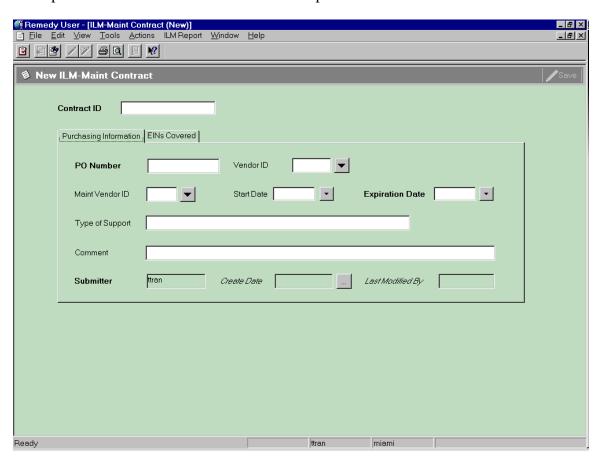


Figure 27.3.9-1. ILM-Maint Contract GUI (1 of 2)

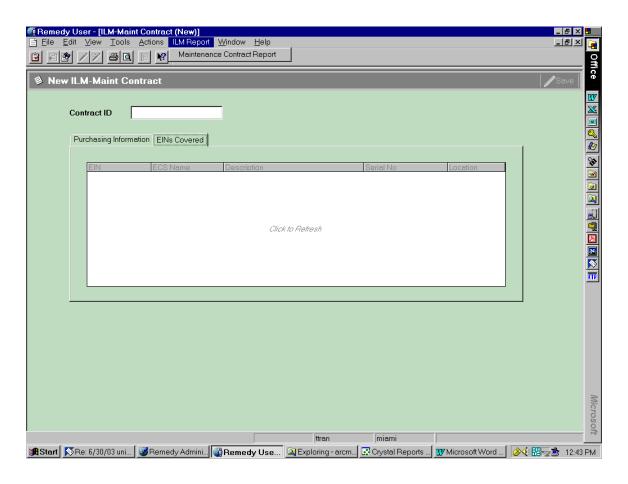


Figure 27.3.9-2. ILM-Maint Contract GUI (2 of 2)

Table 27.3.9-1 describes the field descriptions for the ILM-Maint Contract form.

Table 27.3.9-1. ILM-Maint Contract Field Descriptions

Field Name	Data Type	Size	Entry	Description
Contract ID	Char	10	Required	Identifier for the maintenance contract as assigned by purchasing or provided by the vendor.
PO Number	Char	10	Required	Purchase order number of the purchase order that procured the maintenance coverage.
Vendor ID	Char	6	Optional	Code for the vendor with whom the contract is placed.
Maint Vendor ID	Char	6	Optional	Code for the vendor whom will provide the services.
Start Date	Date		Optional	Date the contract is to become effective.
Expiration Date	Date		Required	Date the contract will expire.
Type of Support	Char	40	Optional	Type of support procured.
Comment	Char	60	Optional	Miscellaneous information specific to the maintenance contract.
EINs Covered	Table field		System- supplied	Field for displaying the EINs covered under the maintenance contract.
Submitter	Char	30	System- supplied	The user whom created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user last modified the record.

Table 27.3.9-2. Procedures to Generate Maintenance Contract Report

Perform	Action	Expected Result
Navigate to the ILM- Maint Contract Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-Maint Contract -> Search	ILM-Maint Contract form is displayed.
Run Maintenance Contract Report	 Find the Maintenance Contract of interest ILM Report - > Maintenance Contract Report When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. Close the report preview. 	◆ The Maintenance Contract Report is displayed. See Figure 27.3.9-3 for the report layout.

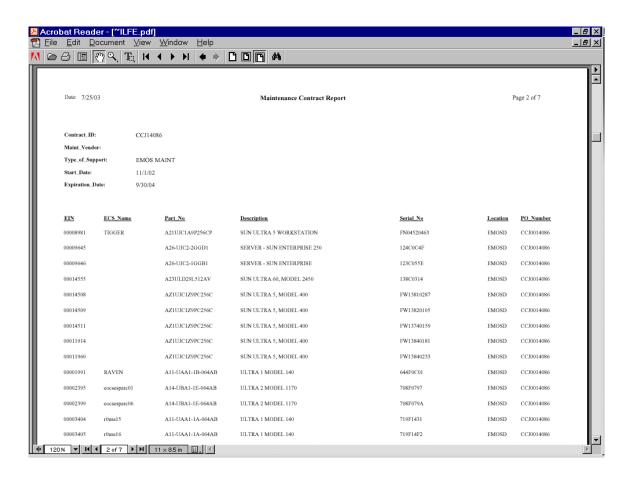


Figure 27.3.9-3. Maintenance Contract Report GUI

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27.3.10 ILM-Sites GUI

This form (Figure 27.3.10-1) allows operators to maintain a set of valid standard codes and descriptions for identifying ECS sites. Each code represents one site.

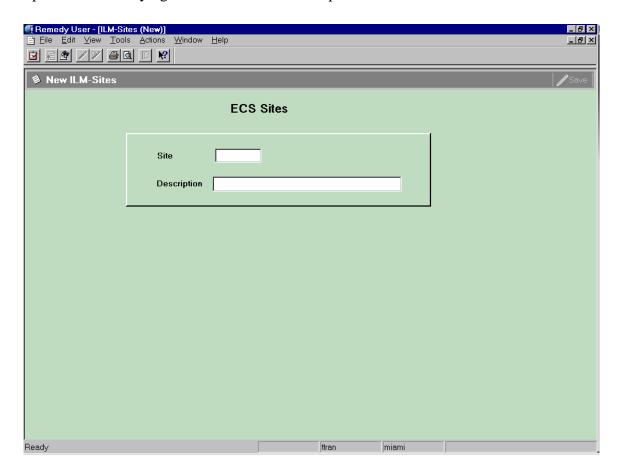


Figure 27.3.10-1. ILM-Sites GUI

Table 27.3.10-1 describes the fields on the ILM-Sites form.

Table 27.3.10-1. ILM-Sites Field Descriptions

Field Name	Data Type	Size	Entry	Description
Site	Char	6	Required	Code for an ECS site.
Description	Char	40	Required	Description of the site.

27.3.11 ILM-Inventory Location GUI

The form shown in Figure 27.3.11-1 is used to maintain information about ECS inventory locations. This standardized information is available to other screens and reports, which can access it by reference to a location.

<u>Note</u>: An important distinction is made in Remedy between an ECS site and an inventory location. Sites are officially designated by NASA and generally include the SMC, DAACs, and other official support installations. ECS Property Administrators designate inventory locations for purposes of property management. They are typically facilities or locales where inventory items are stored or installed, and more than one can exist at a site. Inventory locations are sometimes assigned the same names and codes as a site, but Remedy ILM treats the two as different entities.

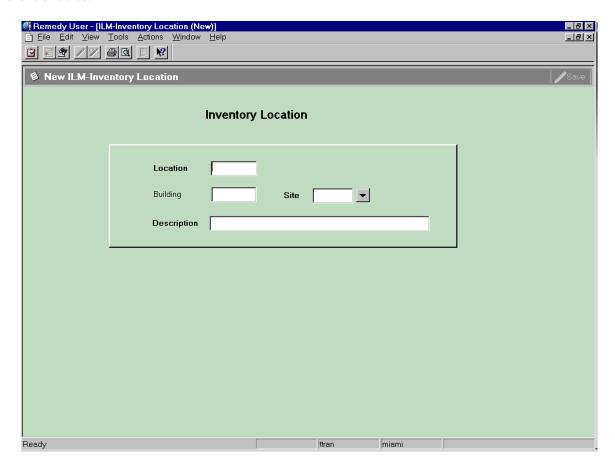


Figure 27.3.11-1. ILM-Inventory Location GUI

Table 27.3.11-1 describes the fields on the ILM-Inventory Location form

Table 27.3.11-1. ILM-Inventory Location Field Descriptions

Field Name	Data Type	Size	Entry	Description
Location	Char	6		Identifier for the inventory location where material can be found.
Building	Char	6	Optional	Building where the inventory items can be found.
Description	Char	30	Required	Description for the location id.
Site	Char	6	Required	Code for the ECS site hosting the inventory location.

27.4 Maintenance Management

Maintenance Work Orders (MWOs) are used for collecting downtime information for equipment subject to Reliability, Maintainability, and Availability (RMA) reporting as well as to identify equipment that has failed and/or been replaced during system maintenance. By way of a special feature available to the ILM-MWO and the ILM-MWO Line Item forms, operators can have the system update property records automatically based on the maintenance activities a work order describes. The following sections will describe maintenance work orders in detail.

27.4.1 ILM-MWO GUI

The ILM-MWO form (Figures 27.4.1-1 through 27.4.1-5) provides the ability to create and update maintenance work orders as maintenance activity proceeds and as additional information about the repair becomes known. It also has a special feature that updates property records on demand based on events and data described about a work order's line items.

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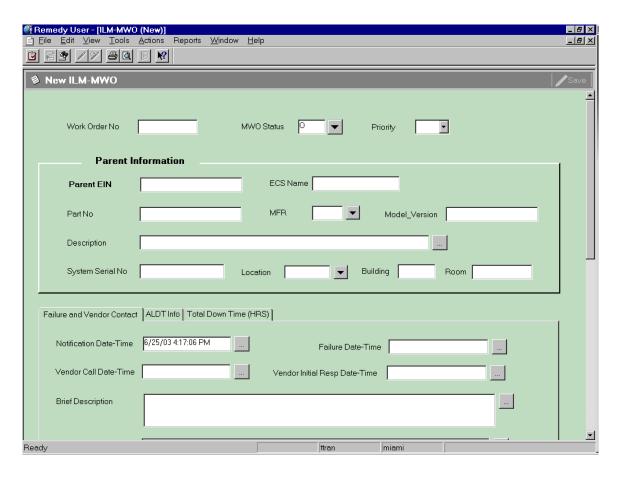


Figure 27.4.1-1. ILM-MWO GUI – Parent Information

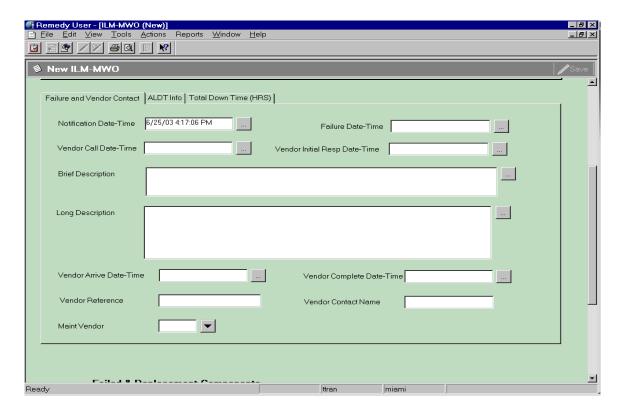


Figure 27.4.1-2. ILM-MWO GUI - Failure and Vendor Contact

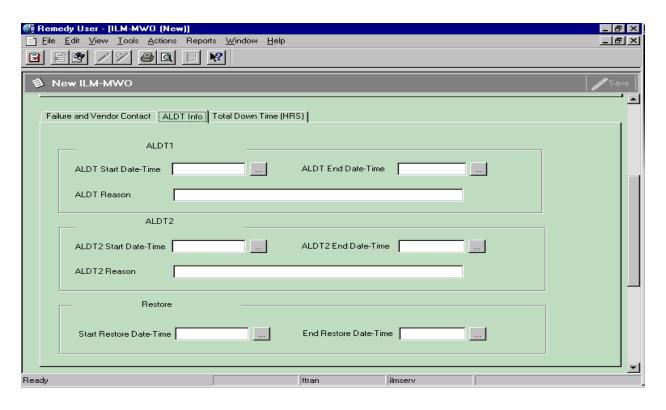


Figure 27.4.1-3. ILM-MWO GUI – ALDT

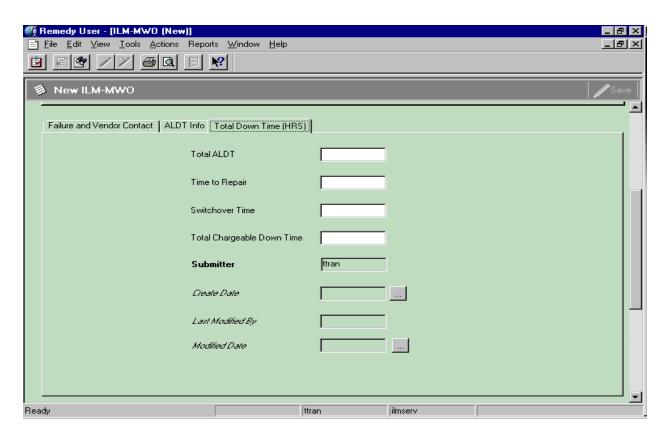


Figure 27.4.1-4. ILM-MWO GUI - Total Down Time

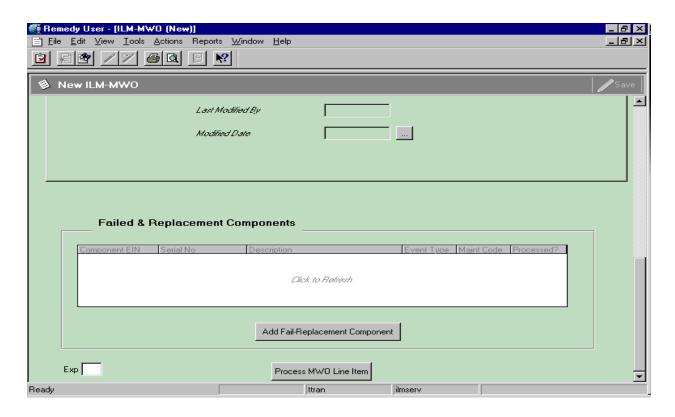


Figure 27.4.1-5. ILM-MWO GUI - Failed & Replacement Components

Table 27.4.1-1 describes the fields on the ILM-MWO Form.

Table 27.4.1-1. ILM-MWO Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Work Order No	Char	10	optional	Identifier for the work order. The work order no is prefixed with site first three letter.
MWO Status	Char	1	optional; O, A, F, or R	Code for the status of the work order. O = Open; A = Audit; F=Finish; R = Retired.
Priority	Char	1	optional	Code for the priority assigned to the work.
Parent EIN	Char	20	required	EIN for the parent item in an EIN structure.
System Serial Number	Char	30	system- supplied	Serial number of the item entered as Parent EIN.
ECS Name	Char	30	system- supplied from EIN record	Name of the machine with which the item is associated.
Part No	Char	34	system- supplied from EIN record	Manufacturer's part number for the item entered as Parent EIN.
Description	Char	60	system- supplied from EIN record	Manufacturer's description for the item entered as Parent EIN.
Location	Char	8	system- supplied from EIN record	Designator for the location where the item entered as Parent EIN is situated.
Room	Char	6	system- supplied from EIN record	Room in which the item entered as Parent EIN is situated.
Notification Date- Time	Date-Time		optional	The date and time problem was reported. This field is initialized with the current date and time but can be modified.
Failure Date-Time	Date-Time		optional	Date and time that the failure occurred. The earliest between the following: 1) the time the LMC (Local Maintenance Coordinator) is notified or 2) the time the hardware problem is first recognized.
Brief Description	Char	140	optional	A brief description of the problem and resolution.
Long Description	Char	1024	optional	A long description of the problem and resolution relevant to the maintenance event.

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Table 27.4.1-1. ILM-MWO Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Vendor Call Date-	Date-Time	0.20	optional	The date and time the maintenance vendor was
Time			opiioria.	called.
Vendor Initial	Date-Time		optional	Indicate the vendor initial response date and time
Resp Date-Time				to the service call.
Vendor Arrive	Date-Time		optional	The date and time the maintenance vendor
Date-Time	Data Tima			actually arrived to perform the repairs.
Vendor Complete Date-Time	Date-Time		optional	Date and time the repair was completed.
Vendor Contact Name	Char	30	optional	Vendor point of contact.
Vendor Reference	Char	20	optional	Identifier to the reference when contacting the vendor about the problem with the item.
ALDT Start Date- Time	Date-Time		optional	The date and time a delay in repairing the system began.
ALDT End Date- Time	Date-Time		optional	The date and time a delay in repairing the system ended.
ALDT Reason	Char	60	optional	A code for the reason a delay was encountered.
Start Restore Date-Time	Date-Time		optional	The date and time when start restoring the failed system.
End Restore Date- Time	Date-Time		optional	The date and time end restoring the system.
Total ALDT	Real	5.2	optional	Total Administrative logistic delay time (ALDT) Specified in hours.
Time To Repair	Real	5.2	optional	Time required to effect the repair. Specified in hours.
Switchover Time	Real	5.2	optional	Time required for system switch-over. Specified in hours.
Total Chargeable Down Time	Real	5.2	optional	Time to be charged for downtime. Specified in hours.
Submitter	Char	30	system- supplied	The user whom created the record.
Create Date	Date		system- supplied	Date the record was created.
Last Modified By	Char	30	system- supplied	The name of the user who last changed this record.
Modified Date	Date		system- supplied	The last date the record was modified.
Failed & Replacement Components	Table field		system- supplied	Field for displaying the failed and replacement components.

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The following buttons/functions are unique to the ILM-MWO form:

- Add Fail/Replacement Component provides access to the ILM-MWO Line Item Form (Figure 27.4.2-1) for adding data about components involved in individual maintenance actions.
- Process MWO Line Item The Process MWO Line Item button provides a convenient, reliable, and efficient means for updating ILM property records based on information contained in ILM-MWO line item form. New EIN records are created as necessary, as are corresponding Part No and EIN structure records. Processing adds new items to the ECS inventory, archives those that have failed or been returned to the vendor, and re-assigns any that have been relocated or returned to stock. Additionally, items returned to a vendor are rendered obsolete with respect to their parent EINs and, of those that had failed, costs are transferred to their replacements. If Remedy is to update property records based on ILM-MWO line item data, line item records must specify values for Event Type and Maint Code. They determine the type of property record changes to be made. (See Table 27.4.2-2) Additionally, operators must supply a value for New Parent EIN if an item is designated for relocation. Other line item fields, such as Component EIN, Change Date, Replacement's EIN, New Location, and New Room, have special significance as well in that they influence which database records actually change.

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Table 27.4.1-2. Procedure to Add a New Work Order

Perform	Action	Expected Result
Navigate to the ILM- MWO Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-MWO -> New	ILM-MWO form is displayed and ready for the user to add a new MWO record.
Creating a new work order	 Fill in the necessary information: Work Order No – User may enter a Work Order No or leave this field blank. Leaving this field blank, the system will generate a Site's prefix work order no. Select the Work Order Status from the MWO Status field. The default is "O" for Open. Select a priority from the list of priority: Enter a 1 for any malfunction that results in down time of a production system and immediate correction is needed. Enter a 2 for any malfunction that impairs system performance but does not result in down time; however, may result in down time if system must be brought down to fix the problem. Enter a 3 for any malfunction that will not result in system down time (e.g. minor flickering screen, key sticking, sticking mouse, etc) Enter Parent EIN number Complete the Failure and Vendor Contact Information, ALDT, and Total Down Time sections. Click on the Save icon on the tool bar to save the record. 	 When the Parent EIN is entered and the Parent EIN existed in the ILM-EIN form, the system will populate the Parent Information section with the information about the entered Parent EIN. The system will generate the next Site's prefixed Work Order number after the record is saved. The newly created Work Order number is displayed in the Status bar on the bottom left of the form.

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Table 27.4.1-3. Procedures to Generate ILM-MWO Predefined Reports

Perform	Action		Expected Result
Navigate to the ILM- MWO Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-MWO -> Search ◆ Perform a Search for the records to be reported.	•	ILM-MWO form is displayed.
Run Work Order Verification Report	 Find the Work Order of Interest When the records are displayed, Reports -> Work Order Verification When the report is displayed, user has the option to either print the report by pressing the print icon, or user may export the report into a file by pressing the Export Icon next to the print icon. Close the report preview. 	•	The Work Order Verification Report is displayed. Refer to Figure 27.4.1-6 for the report layout.
Run an RMA report and export into MS Excel	 ◆ Select the records of interest to perform the report on. ◆ When the record is displayed, make sure to un-select the highlighted record by pressing the Ctrl and single click the highlighted item simutaneously. ◆ Tools -> Reporting -> Rma_Rpt -> Report -> Export To -> File ◆ When the Report to File GUI (see Figure 27.3.1.1-3) is displayed. Select the appropriate directory to save the report in Enter a report file name Save as Type = All File (*.*) Warning: The report will not work if the Save as Type is anything else other than All File. Press the Save button ◆ Bring up MS Excel ◆ File -> Open -> <report name=""></report> ◆ When the Text Import Wizard GUI is displayed: Delimiters -> Next Select Tab -> Next Change the EIN, Parent EIN, Part No, and Serial No fields to Text. This will keep all the leading zeros. 	•	The RMA report is displayed. User may make any necessary ajustment to this report. Please refer to MS Excel help for any question on how to use MS Excel. Refer to Figure 27.4.1-7 for the report layout.

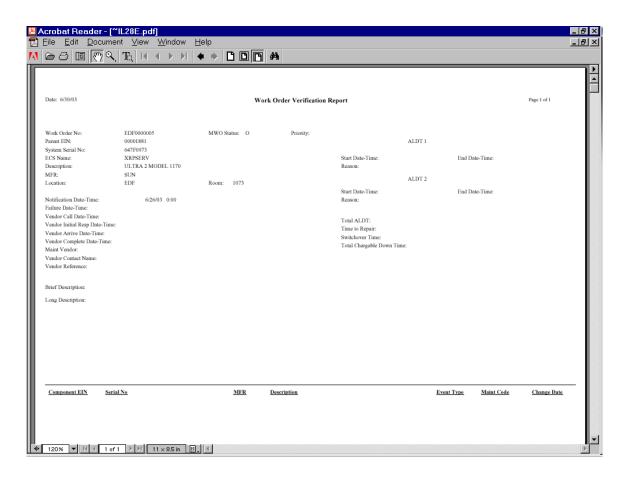


Figure 27.4.1-6. Work Order Verification Report GUI

Work Order	MFR	DESCRIPTION OF SYSTEM	SYSTEM	SITE	DATE/TIME Partially/Capabe	TOTAL Partially Capable TIME	DATE/TIME SYSTEM	DATE RETURNED TO	TOTAL	Restore	Problem Description & Solution	Notes
_		DOWN				(HRS)	DOWN	OPERATION	TIME (HRS)			
EDC0000509	SGI	RACK SERVER	e0drg12	EDC	10/16/02 9:00		10/16/02 9:00	10/16/02 10:00	1.0	1.0	System board crashed due to bad	Downtime was the result of
		BASIC CHASIS									node board.	troubleshooting and repair actions.
												System took an hour to restore but
												was operational.
LaR0000269	STK	9940A	STK	LaRC	10/15/02 8:00	28.0		10/16/02 12:00			Bad drive. Replace drive.	
			Powerderho									
			rn silo2									
EDC0000498	STK	Small	e0hippi1	EDC	09/30/02 5:15	224.7		09/30/02 16:00			Bad HIPPI fiber Channel card	No Down time associated because
		Communications									going to e0drg12.	Ops had an alternative path GB
		Rack										router.
EDC0000500	SUN	Enterprise 4000	e0sps04	EDC	09/09/02 2:45	8.3		09/09/02 11:00			32MB simm had parity errors	There are redundanct cpu boards
		Enclosure 8-Slot									causing box to reboot.	with memory.
		Card Ca										

Figure 27.4.1-7. RMA Report GUI

27.4.2 ILM-MWO Line Item GUI

The ILM-MWO Line Item form (Figures 27.4.2-1 through 27.4.2-3) provides the ability for the Local Maintenance Coordinator (LMC) to identify equipment that has failed and/or been replaced during system maintenance. In general, a line item should be created for each EIN component that has failed, been replaced, or been added new. Note: line items can be created even if an EIN record does not exist for the component. Line items may only be created via the ILM-MWO form by pressing the "Add Fail/Replacement Component" button on the bottom of the form. Table 27.4.2-1 describes the fields on the ILM-MWO Line Item form.

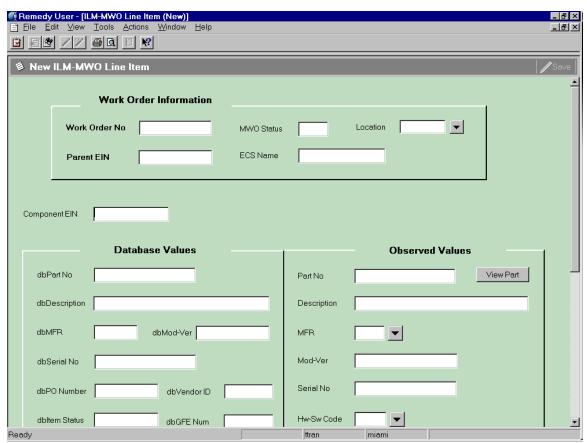


Figure 27.4.2-1. ILM-MWO Line Item GUI (1 of 3)

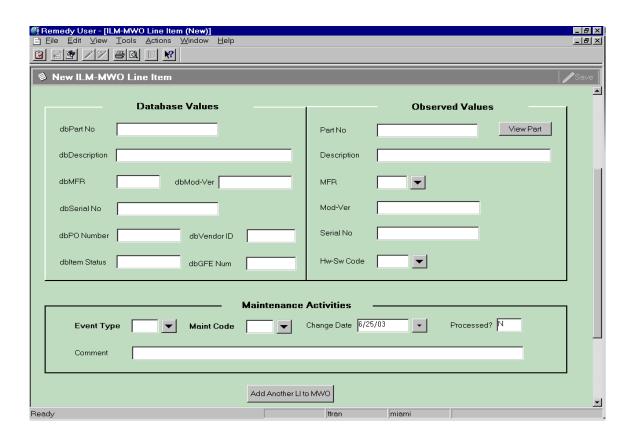


Figure 27.4.2-2. ILM-MWO Line Item GUI (2 of 3)

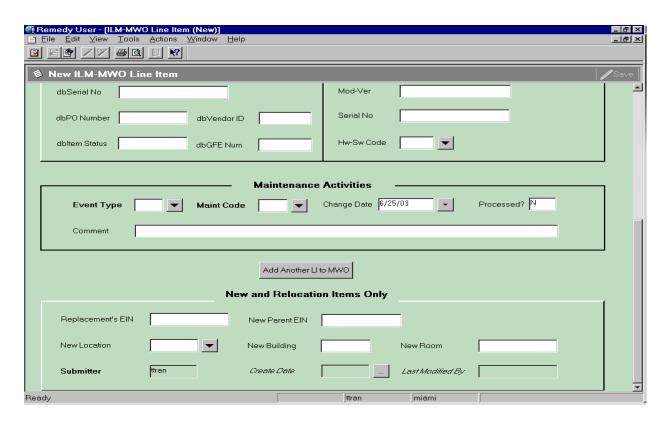


Figure 27.4.2-3. ILM-MWO Line Item GUI (3 of 3)

Table 27.4.2-1 describes the fields on the ILM-MWO Line Item form.

Table 27.4.2-1. ILM-MWO Line Item Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Work Order No	Char	10	System- supplied	Identifier for the work order.
Parent EIN	Char	20	System- supplied	EIN for the parent item in an EIN structure.
MWO Status	Char	1	System- supplied	Code for the status of the work order. O = Open; A = Audit; F=Finish; R = Retired.
ECS Name	Char	30	System- supplied	Name of the machine with which the item is associated.
Location	Char	8	System- supplied	Designator for the location where the item entered as Parent EIN is situated.
Component EIN	Char	20	Optional	Identifier for an item that is a child (component) of a parent EIN and the target of the maintenance event. If the field is left blank, the system will create an inventory number with a C-prefix for it automatically when the line item is processed.
Database Values				If the entered Component EIN exists in the ILM- EIN form, the system will populate this section with the data derived from the ILM-EIN form that describes the component EIN undergoing the maintenance activity.
Observed Values				User may enter information that describes the Component EIN in this section. If the Component EIN does not exist in the database, the component EIN will be added to the database using the information provided in the Observed Values section.
Part No	Char	34	Optional	Manufacturer's or vendor's part number for the item.
Description	Char	60	Optional	Manufacturer's or vendor's description of the item.
MFR	Char	6	Optional	Code used for the manufacturer of the item.
Mod-Ver	Char	24	Optional	Model or Version of the item.
Serial No	Char	30	Optional	Serial number of the item.
Item Status	Char	6	Optional	Code that designates the status of the item.
Hw-Sw Code	Char	2	Optional	Code for classifying items according to source of inventory.
GFE Num	Char	8	Optional	Gov't Furnished Equipment (GFE) number for the item.

Table 27.4.2-1. ILM-MWO Line Item Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Event Type	Char	1	Required	Code identifying a type of maintenance event (N=new item installed; F=failed item replaced; R=serviceable item replaced).
Maint Code	Char	1	Required	Code designating the item's disposition. Property records are updated differently depending on the value entered. (R = Relocate, S = Stock, V = Vendor).
Change Date	Date		Required	Effective date of the configuration change.
Processed?	Char	1	System- supplied	Flag signifying whether or not the line item has been processed.
Replacement's EIN	Char	20	Optional	Identifier of the new item being used as a replacement. This field is used only for items that have failed and replaced by a new EIN.
New Parent EIN	Char	20	Optional, Required when the Event Type = R and Maint Code = R	EIN of the item to which the Component EIN is to be re-assigned. This field is applicable only to components that have failed or are being replaced (Event Type="F" or "R"), and are being relocated (Maint Code="R"). The value must be supplied or the item will not get processed.
New Location	Char	6	Optional	Code for the new inventory location to which the item is to be assigned.
New Building	Char	6	Optional	Building where the item is to be installed.
New Room	Char	15	Optional	Room where the item is to be installed.
Submitter	Char	30	System- supplied	The user whom created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user last modified the record.

Table 27.4.2-2 lists the appropriate combinations of Event Type and Maint Code and the effects on property records when processed.

Table 27.4.2-2. Effects on Property Records by MWO Line Item Processing (1 of 4)

Event Type	Maint Code	Situation/Property Record Updates
F	S	♦ When an item failed and returned to stock.
(Failed)	(Stock)	EIN records:
		Creates a record if one doesn't exist for the specified component EIN
		For the specified component EIN:
		Clears its Parent EIN
		Clears its installation date
		Sets Item status to "F"
		Sets audit date to the Change Date
		Sets ECS name to "IN STOCK"
		 Sets location, building, and room to new values.
		OEM part records:
		Creates an OEM Part record if "observed values" for Part No, MFR, and
		Description are specified and the part record doesn't already exist
		EIN structure records:
		Obsoletes the specified component EIN in EIN Structures where it is
		active. The structure is rendered inactive as of the specified Change
		Date
		Inventory transaction records:
F	V	 Creates an entry for event of type "MFS" for the specified component When an item failed and returned to the vendor.
(Failed)	(Vendor)	♦ When an item failed and returned to the vendor. EIN records:
(Falled)	(vendor)	 If the Component EIN field is blank, the system will not process the
		record and sets the Process field to X.
		Creates a record if one doesn't exist for the specified component EIN
		For the specified component EIN:
		Clears its Parent EIN
		Clears its installation date
		Sets item status to "X"
		Sets audit date to the Change Date
		Sets ECS name to "ARCHIVE"
		 Sets location to "EDFARC" and clears building and room values.
		OEM part records:
		 Creates an OEM Part record if "observed values" for Part No, MFR, and Description are specified and the part record doesn't already exist
		EIN structure records:
		Obsoletes the specified component EIN in EIN Structures where it is
		active. The structure is rendered inactive as of the specified Change Date
		Inventory transaction records:
		Creates an entry for event of type "MFV" for the specified component

Table 27.4.2-2. Effects on Property Records by MWO Line Item Processing (2 of 4)

Event Type	Maint Code	Property Record Updates
N (New)	S (Stock)	 When the replacement item is new and taken from stock. EIN records: Creates a record if one doesn't exist for the specified component EIN For the specified component EIN: Sets the Parent EIN to the MWO's Parent EIN Sets installation date to the Change Date Sets item status to "I" Sets audit date to the Change Date Sets ECS name to that of the Parent EIN specified for the MWO itself
		 Sets location and room values to that of the Parent EIN specified for the MWO OEM part records: Creates an OEM Part record if "observed values" for Part No, MFR, and Description are specified and the part record doesn't already exist EIN structure records: Obsoletes the specified component EIN in EIN Structures where it is active, if any. The structure is rendered inactive as of the specified Change Date Adds the EIN as a component of the item specified as a component of the MWO's Parent EIN. The structure is rendered active as of the Change Date specified Inventory transaction records: Creates an entry for event of type "MNS" for the specified component

Table 27.4.2-2. Effects on Property Records by MWO Line Item Processing (3 of 4)

Event Type	Maint Code	Property Record Updates
N (New)	V (Vendor)	When the replacement item is newed and came from the vendor. EIN records:
		 Creates a record if one doesn't exist for the specified component EIN For the specified component EIN: Sets the Parent EIN to the MWO's Parent EIN Sets installation date to the Change Date Sets receive date to the Change Date Sets item status to "I" Sets audit date to the Change Date Sets ECS name to that of the Parent EIN specified for the MWO itself Sets location, building, and room values to that of the Parent EIN specified for the MWO itself If the component is replacing an EIN specified in a separate line item as a failed item being returned to the vendor and, copies the item cost from the EIN record for the failed item to the EIN record for the new item For a failed item being replaced by the specified component EIN: Sets cost to 0
		 OEM part records: Creates an OEM Part record if "observed values" for Part No, MFR, and Description are specified and the part record doesn't already exist EIN structure records: Obsoletes the specified component EIN in EIN Structures where it is active, if any. The structure is rendered inactive as of the specified Change Date Adds the EIN as a component of the item specified as a component of the MWO's Parent EIN. The structure is rendered active as of the Change Date specified Inventory transaction records: Creates an entry for event of type "MNV" for the specified component

Table 27.4.2-2. Effects on Property Records by MWO Line Item Processing (4 of 4)

Event Type	Maint Code	Property Record Updates
R	R	♦ When an item is being relocated to a new machine.
R (Replaced)	R (Relocate)	 EIN records: Creates a record if one doesn't exist for the specified component EIN: For the specified component EIN: Sets the Parent EIN to the New Parent EIN Sets the Installation Date to Change Date Sets item status to "I" Sets audit date to the Change Date Sets ECS name to the name of the new parent EIN Sets location, building, and room to that of the new parent EIN OEM part records: Creates an OEM Part record if "observed values" for Part No, MFR, and Description are specified and the part record doesn't already exist EIN structure records: Obsoletes the specified component EIN in EIN Structures where it is active. The structure is rendered inactive as of the specified Change Date Adds the EIN as a component of the item specified as New Parent EIN.
R (Replaced)	S (Stock)	The structure is rendered active as of the specified Change Date Inventory transaction records: Creates an entry for event of type "MRR" for the specified component When an item is being returned to stock. EIN records: Creates a record if one doesn't exist for the specified component EIN For the specified component EIN:
		 Sets the Parent EIN to blank Clears its installation date Sets item status to "R" Sets audit date to the Change Date Sets ECS name to "IN STOCK" Sets location, building, and room to new values, if specified OEM part records: Creates an OEM Part record if "observed values" for Part No, MFR, and Description are specified and the part record doesn't already exist EIN structure records: Obsoletes the specified component EIN in EIN Structure where it is active. The structure is rendered inactive as of the specified Change Date
		Inventory transaction records: Creates an entry for event of type "MRS" for the specified component

Table 27.4.2-3. Procedure to Add Work Order Line Items (1 of 3)

Perform	Action	Expected Result
Navigate to the ILM- MWO Line Item Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-MWO -> Search ◆ Find the Work order No to add the line items ◆ When the Work order is displayed, click on the "Add Fail-Replacement Component" button on the bottom of the ILM-MWO form Warning: User Must use the ILM-MWO form to create new work order line items. The reason being is that the system needs to know the work order where the line item was generate from.	ILM-MWO Line Item form is displayed and ready for the user to add new work order line items.
Entering a failed item and returned to vendor	At the ILM-MWO Line Item form, Component EIN – Enter a component EIN if known – the system populates the "Database Values" section if the Component EIN existed in the ILM-EIN form. If the Component EIN does not exist in the database, complete the "Observed Values" section. Event Type – Enter an "F" for failed. Maint Code – Enter an "V" to specify that the failed component was returned to the vendor. Enter a Replacement EIN into the Replacement EIN field if known. Press the "Add Another LI to MWO" button.	Item form and is ready for user to
Entering a failed item and return to stock	At the ILM-MWO Line Item form, Component EIN – Enter a component EIN if known – the system populates the "Database Values" section if the Component EIN existed in the ILM-EIN form. If the Component EIN does not exist in the database, complete the "Observed Values" section. Event Type – Enter an "F" for failed. Maint Code – Enter an "S" to specify that the failed component was returned to stock. Enter the new stock location values in the New Location, New Building, and New Room fields. Press the "Add Another LI to MWO" button.	Item form and is ready for user to

Table 27.4.2-3. Procedure to Add Work Order Line Items (2 of 3)

	17.4.2-3. Procedure to Add Work Order	 . ,		
Perform	Action	Expected Result		
adding a component EIN to the MWO's Parent EIN structure where the Component EIN came from stock	 At the ILM-MWO Line Item form, Component EIN – Enter a component EIN if known – the system populates the "Database Values" section if the Component EIN existed in the ILM-EIN form. If the Component EIN does not exist in the database, complete the "Observed Values" section. Event Type – Enter an "N" for failed. Maint Code – Enter an "S" to specify that the failed component came from stock. Press the "Add Another LI to MWO" button. 	The system added the Failed component to the ILM-MWO Line Item form and is ready for user to add another line item to the work order. Refer to table 27.4.2-2 Event Type (N) and Maint Code (S) for detail description of property updates after the Property Administrator processes this line item.		
adding a new component EIN to the MWO's Parent EIN Structure where the Component EIN came from the vendor.	 At the ILM-MWO Line Item form, Component EIN – Enter a component EIN if known – the system populates the "Database Values" section if the Component EIN existed in the ILM-EIN form. If the Component EIN does not exist in the database, complete the "Observed Values" section. Event Type – Enter an "N" for failed. Maint Code – Enter an "V" to specify that the failed component was returned to the vendor. Press the "Add Another LI to MWO" button. 	The system added the Failed component to the ILM-MWO Line Item form and is ready for user to add another line item to the work order. Refer to table 27.4.2-2 Event Type (N) and Maint Code (V) for detail description of property updates after the Property Administrator processes this line item.		
Relocating a component to a new Parent EIN structure	At the ILM-MWO Line Item form, Component EIN – Enter a component EIN if known – the system populates the "Database Values" section if the Component EIN existed in the ILM-EIN form. If the Component EIN does not exist in the database, complete the "Observed Values" section. Event Type – Enter an "R" for relocate. Maint Code – Enter an "R" to specify that the component EIN is being relocated to a new Parent EIN. Enter the new Parent EIN into the New Parent EIN field. Press the "Add Another LI to MWO" button.	The system added the Failed component to the ILM-MWO Line Item form and is ready for user to add another line item to the work order. Refer to table 27.4.2-2 Event Type (R) and Maint Code (R) for detail description of property updates after the Property Administrator processes this line item.		

Table 27.4.2-3. Procedure to Add Work Order Line Items (3 of 3)

Perform	Action		Expected Result
known – the substance of the component o	Line Item form, EIN – Enter a component EIN if system populates the alues" section if the Component in the ILM-EIN form. Inent EIN does not exist in the implete the "Observed Values" Enter an "R" for relocate. Enter an "S" to specify that int EIN is being returned to it is stock location values in the in, New Building, and New it is section.	•	The system added the Failed component to the ILM-MWO Line Item form and is ready for user to add another line item to the work order. Refer to table 27.4.2-2 Event Type (R) and Maint Code (S) for detail description of property updates after the Property Administrator processes this line item.

27.5 License Management

Many software products used in ECS are licensed; that is, subject to conditions limiting how many users can run the product and where. Licenses take numerous forms. Nodelock licenses let users run the product, but only on a designated machine; counted nodelock licenses limit the number of users that can run the product on that machine. Floating licenses allow users to run a product from any machine in a network. They may limit the number of users that can run the product concurrently, the number of servers that can be used concurrently, the number of sites that can use the product, or any combination of the above. Licenses can apply to a named product, one or more of its features, one or more of its versions, and/or one or more types of platforms. Some vendors enforce these provisions through use of license keys, but ECS is accountable for adhering to licensing provisions whether vendors use keys or not.

When purchasing a product or obtaining an upgrade, engineering determines what licensing provisions are required. Depending on the product, license entitlements may appear as separate line items on purchase orders, or frequently not. (For example, purchased licensing provisions may be provided with the product; that is, not purchased separately.) License certificates (rights to certify) typically accompany software when it arrives and, in the case of operating system software, accompanies the computers themselves. These certificates describe the licensing provisions that were purchased and may carry an associated cost. Sometimes, the certificates include a license key, but usually they represent the right to obtain keys.

Multiple licenses are sometimes obtained from the product vendor under the provisions of a single license certificate. Each license would account for part of the rights-to-use under the

certificate. Conversely, individual licenses can consume rights-to-use from more than one certificate. Each unique license key implies a unique license, but not every license has a key.

Licenses are allocated to the sites and host machines where their keys are installed, and keyless licenses are allocated to where their software products are installed. This is not so much for property accounting (i.e., cost accounting), but to verify adherence to purchased licensing provisions and to identify where licenses are used in case rights-to-use must transfer elsewhere.

License rights-to-use are counted differently depending on the type of licenses purchased. Rights for nodelock license are allocated and counted by node and are consumed at the rate of one license per node. Floating license rights are allocated and counted based on number of users on a network rather than by specific machines, where the network is represented by a machine on which the license is installed. Floating license rights are consumed at the rate of number of users per license. Occasionally, a purchased entitlement covers a total number of users across a limited number of machines. In this case, rights are consumed at the rate of one license per node as well as number of users per license.

The following forms provide the software license administrator (SLA) capabilities to manage software licenses.

- ILM-License Products to maintain standardized information about manufacturer's part numbers.
- ILM-License Entitlement to maintain records of purchased rights-to-use for licensed software.
- ILM-License to maintain records of software licenses obtained from vendors and maintains license allocation.
- ILM-License Mapping manages the mapping of a license to purchased entitlements.
- ILM-Additional Host identifies redundant or backup server machines on which the license will be installed

27.5.1 ILM-License Products GUI

This form (Figure 27.5.1-1) provides the SLA the ability to maintain standardized information about manufacturers' part numbers. Entitlement Part number must be recorded before they can be added to an entitlement or license via the ILM-Entitlement form or the ILM-License form.

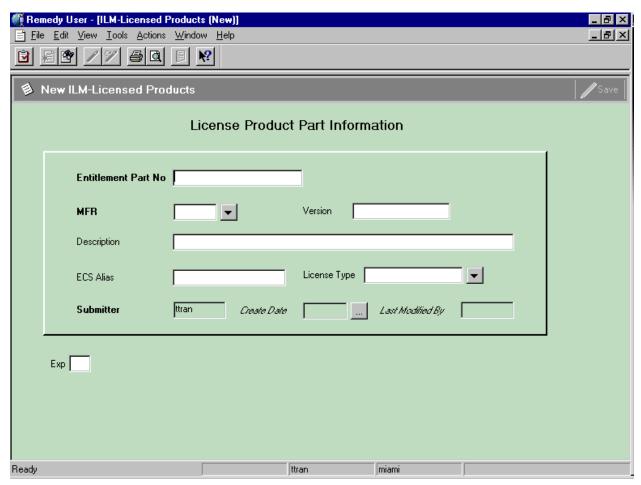


Figure 27.5.1-1. ILM-License Products GUI

Table 27.5.1-1 describes the ILM-License Products form field definition.

Table 27.5.1-1. ILM-License Products Field Descriptions

Field Name	Data Type	Size	Entry	Description
Entitlement Part No	Char	34	Required	Manufacturer's or vendor's part number for the entitlement.
MFR	Char	6	Required	Code for the manufacturer from whom the item was purchased.
Version	Char	34	Optional	Version number of the part.
Description	Char	50	Required	Manufacturer's or vendor's description for the entitlement.
ECS Alias	Char	30	Optional	Common name used in ECS for the licensed product and all its versions and variants.
License Type	Char	16	Optional	Classification that distinguishes among licenses according to rules of use. Examples include: floating (limited number of concurrent users), nodelocked (limited to use on a single machine), project (unlimited use anywhere by individuals working on a certain project), site (unlimited use at a single site), etc.
Submitter	Char	30	System- supplied	The user that created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user who last modified the record.

27.5.2 ILM-License Entitlement GUI

Operators use the ILM-License Entitlement form (Figure 27.5.2-1, 2, & 3) to maintain records of purchased rights-to-use for licensed software, including how many node and user rights-to-use have been consumed, remain, and are under maintenance. Rights consumed and remaining are computed automatically based on the licenses mapped against it. Table 27.5.2-1 provides ILM-License Entitlement field descriptions.

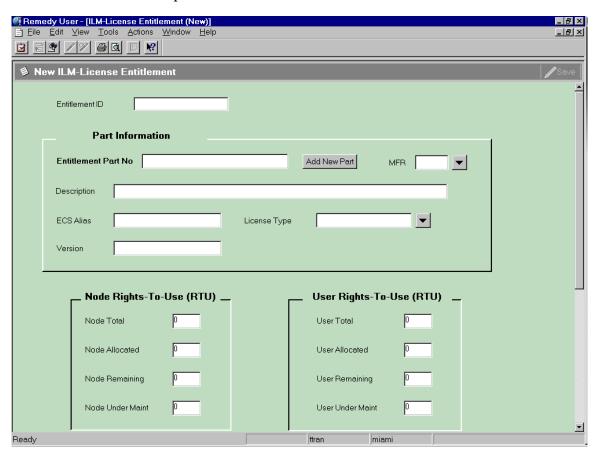


Figure 27.5.2-1. ILM-License Entitlement GUI (1 of 3)

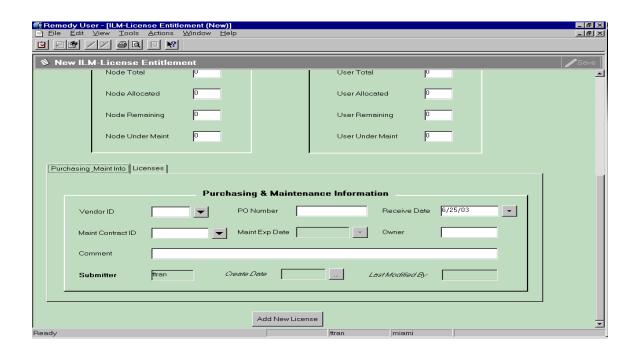


Figure 27.5.2-2. ILM-License Entitlement GUI (2 of 3)

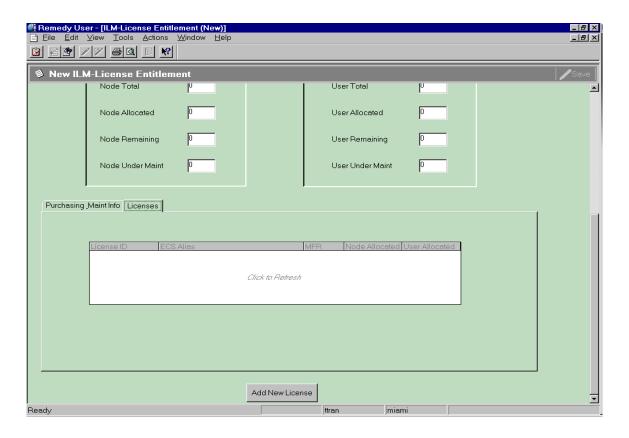


Figure 27.5.2-3. ILM-License Entitlement GUI (3 of 3)

Table 27.5.2-1. ILM-Entitlement Field Descriptions

Field Name	Data Type	Size	Entry	Description
Entitlement ID	Char	10	System supplies	Identifier for a purchased license entitlement.
Entitlement Part No	Char	34	Required	Manufacturer's or vendor's part number for the entitlement.
MFR	Char	6	System supplied	Code for the manufacturer from whom the item was purchased. in the field above.
Description	Char	50	System supplied	Manufacturer's or vendor's description for the entitlement.
ECS Alias	Char	30	System supplied	Common name used in ECS for the licensed product and all its versions and variants.
License Type	Char	16	System supplied	Classification that distinguishes among licenses according to rules of use.
Version	Char	34	System supplied	Version number of the part.
Rights to Use (RTU)	Integer	8	Optional	Quantity of node or user rights-to-use authorized by this purchased entitlement.
Node/User Allocated	Integer	8	System supplied	Quantity of node or user rights under the license entitlement currently allocated by licenses mapped to the entitlement. This value is calculated by the system and reflects the total number of allocations of those licenses.
Node/User Remaining	Integer	8	System supplied	Quantity of node or user rights under a license entitlement not yet consumed by the mapping of licenses to the entitlement.
Node/User Under Maint	Integer	8	System supplied	Quantity of node or user rights-to-use currently under maintenance.
Vendor ID	Char	6	Optional	Code for the vendor from whom the item was purchased.
Receive Date	Date		Optional	Date item was received from vendor.
Maint Contract ID	Char	10	Optional	Identifier for the Maintenance Contract under which the item is covered.
Maint Exp Date	Date		Optional	Date the maintenance contract expired.
Owner	Char	10	Optional	The owner of the entitlement.
Comment	Char	30	Optional	Miscellaneous information specific to the item.
Licenses	Page			This table lists any license(s) the license entitlement is mapped to and how many user rights-to-use was assigned to the license id.
Submitter	Char	30	System- supplied	The user whom created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user who last modified the record.

The following buttons are unique to this form:

- Add New Part Activates the ILM-License Products form. This allows the operator to add new parts.
- Add New License displays the ILM-License form (Figure 27.5.3) to allow the SLA to add new licenses.

Table 27.5.2-2 provides instruction on how to add a new License Entitlement.

Table 27.5.2-2. Procedure to Add New License Entitlement

Table 27.5.2-2. Frocedure to Add New License Entitlement						
Perform	Action	Expected Result				
Navigate to the ILM- License Entitlement Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-License Entitlement - > New	ILM-License Entitlement form is displayed and ready for the user to add new license entitlement.				
Defining a new license entitlement	 Filling in the necessary information, ◆ Entitlement ID – Leave this field blank. The system will generate the next prefixed "LE" number when user saves the record. ◆ Complete the Part information section. Note. The Entitlement Part No field's label is Bolded. Therefore, you must enter a value into the Entitlement Part No field. The Entitlement Part No must exist in the ILM-License Products form. If not, the system will display an error message and will not except the value. ◆ If the license entitlement is a Node lock licenese, complete the Node Rights-To-Use section. ◆ If the license entitlement is a floating license, complete the User Rights-To-Use section. ◆ Complete the Purchasing & Maintenance Info section. ◆ Press the Save icon to save the record. 	◆ The system will generate the next prefixed "LE" licenes entitlement number and saves the new record in the database.				

Note: To move to the next field, use either the TAB key or the Mouse. The Enter key will not move the cursor to the next field.

Table 27.5.2-3 provides instruction on how to run the License Entitlement status report that was specicially designed for this form. This report lists the status of current license entitlements for licensed software products, sorted by software product, version, and license type.

Table 27.5.2-2. Procedures to Generate ILM-License Entitlement Predefined Reports

Perform	Action	Expected Result
Navigate to the ILM- License Entitlement Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-License Entitlement - > Search	ILM-License Entitlement form is displayed.
Run License Entitlement Status Report	 Find the records of interest When the records are displayed, Tools - > Reporting -> License Ent Status Report When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. Close the report preview. 	◆ The License Entitlement Status Report is displayed. See Figure 27.5.2-4 for the report layout.

Note: To move to the next field, use either the TAB key or the Mouse. The Enter key will not move the cursor to the next field.

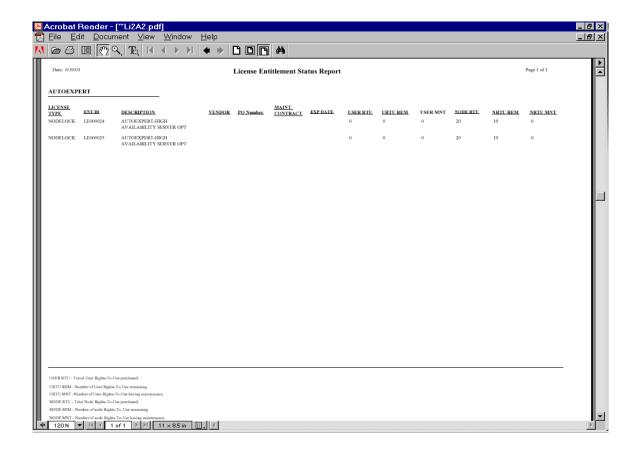


Figure 27.5.2-4. License Entitlement Status Report GUI

27.5.3 ILM-License GUI

The ILM-License form (Figures 27.5.3-1 and 27.5.3-2) maintains records of software licenses obtained from vendors. This form also maintains records about the hosts and sites to which the licenses have been allocated. Licenses must be mapped to purchased license entitlements so that consumption of license rights can be tracked.

A license is a euphemism for the rights granted a number of user to operate a software product or one or more of the product's versions or features concurrently on certain machines. These rights are often encoded in a license "key", but not all products employ such keys.

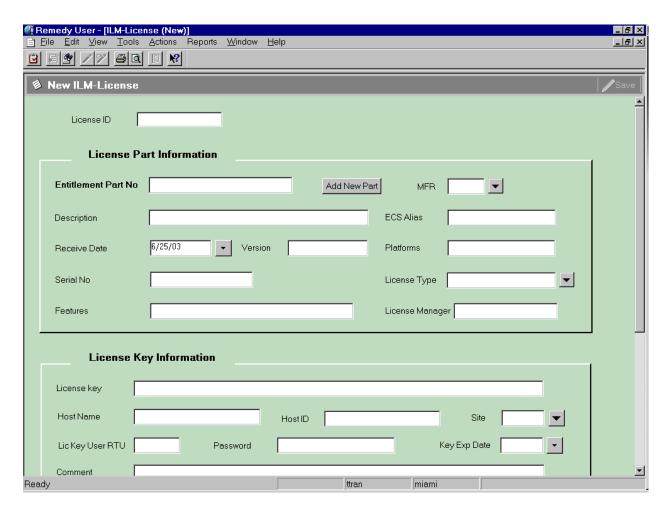


Figure 27.5.3-1. ILM-License GUI (1 of 2)

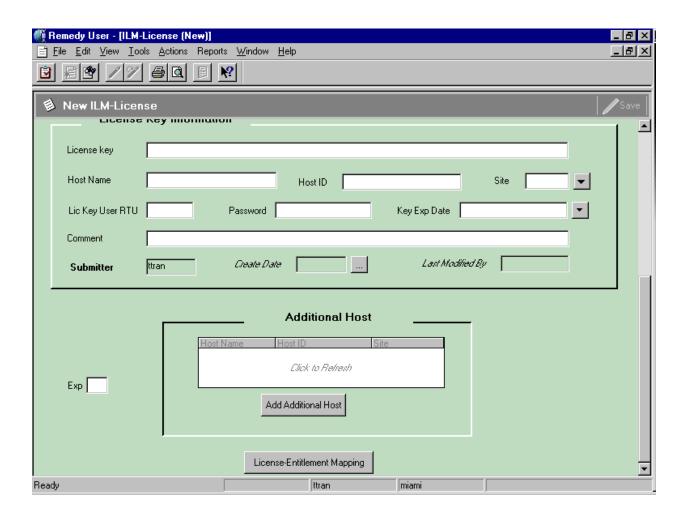


Figure 27.5.3-2. ILM-License GUI (2 of 2)

Table 27.5.3-1 describes the field definition for the ILM-License form, and table 27.5.3-2 and 27.5.3-3 provide instructions on how to create a new license and how to map a license to entitlement.

Table 27.5.3-1. ILM-License Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
License ID	Char	10	System Supplies	Unique designator for a license.
Entitlement Part No	Char	34	Required	Manufacturer's or vendor's part number for the entitlement.
MFR	Char	6	System supplied	Code for the manufacturer from whom the item was purchased.
Description	Char	50	System supplied	Manufacturer's or vendor's description for the entitlement.
ECS Alias	Char	30	System supplied	Common name used in ECS for the licensed product and all its versions and variants.
Receive Date	Date		Optional	Date the license key and/or data arrived.
Version	Char	34	System supplied	Version number of the part.
Platforms	Char	15	Optional	One or more codes for the types of machines to which the license applies (e.g., Sun, SGI, PC, etc.)
Serial No	Char	30	Optional	Vendor-supplied serial number for the license or the product being licensed.
License Type	Char	16	System supplied	Classification that distinguishes among licenses according to rules of use.
Features	Char	54	Optional	Name(s) of one or more features of the licensed product that are covered by the license.
License Manager	Char	12	Optional	Technology employed in managing the license on- line (e.g., flexlm, proprietary, etc.)

Table 27.5.3-1. ILM-License Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description	
License Key	Char	50	Optional	Char of alphanumeric characters that represent the provisions for a license in an encoded form.	
Host Name	Char	30	Optional ECS Name of a machine to which the licens allocated.		
Host ID	Char	20	Optional Host id of the license server machine supplied the vendor when requesting the license. Allocations of licenses to machines are accomplished via the License Allocation Manscreen.		
Site	Char	6	Optional	Code for the site to which the license is allocated.	
Lic Key User RTU	Integer	8	Optional	Number of users authorized by the license to run the licensed product concurrently on a single network. This value limits the user rights-to-use that can be recorded in the license's allocation records.	
Password	Char	20	Optional	Password supplied along with the license key by the vendor.	
Key Exp Date	Date		Optional	Date on which the license key is no longer usable.	
Comment	Char	60	Optional	Comment to be stored in the record.	
Submitter	Char	30	System- supplied	The user whom created the record.	
Create Date	Date		System- supplied	Date the record was created.	
Last Modified By	Char	30	System- supplied	The user last modified the record.	

The following buttons are unique to this form:

- Add New Part Activates the ILM-License Products form. This allows the operator to add new parts.
- License-Entitlement Mapping activates the ILM-License Mapping form that allows the SLA to map the license to the purchased entitlement.
- Add Additional Host activates the ILM-Additional host form to allow the SLA to add redundant host or backup server to the license.

Table 27.5.3-2. Procedure to Add New License and Allocate It to a Machine (1 of 2)

Perform	Action	Expected Result
Navigate to the ILM- License Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-License -> New Or ◆ While the ILM-License Entitlement form is	ILM-License form is displayed and ready for the user to add new license.
	displayed, press the "Add New License" button on the bottom of the form.	
Defining a new license and allocate the license to a host	 Filling in the necessary information, License ID – Leave this field blank. The system will generate the next prefixed "L" number when user saves the record. Complete the Part information section. Note. The Entitlement Part No field's label is Bolded. Therefore, you must enter a value into the Entitlement Part No field. The Entitlement Part No must exist in the ILM-License Products form. If not, the system will display an error message and will not except the value. License Key – Enter the license key that the vendor provided. Enter Host name, Host ID, and Site where the license is allocated. Complete the rest of the information in the 	 The system will generate the next prefixed "L" licenes entitlement number and saves the new record in the database. The system displays the ILM-License Mapping form (Figure 27.5.4-1) with the newly created license information that just created and ready for user to map the license to the puchased entitlement.
	License Key section. ◆ Press the Save icon to save the record.	
Mapping the new license to a puchased entitlement	When the Save button is pressed, the system displays the ILM-License Mapping form with the data about the newly created license record created in the step above. Enter the following information to complete mapping the license to a purchase entitlement:	♦ If the license type is a Node Lock license, the system will decrement 1 node rights-to-use remaining from the Entitlement ID and increments 1 from the Node rights-to-use allocated.
	 Entitlement ID – Enter an Entitlement ID where this license ID should be mapped against. If the license type is a Node lock license, enter "1" to allocate 1 node lock license to this license ID. If the license type is a floating license, enter the number of user rights-to-use allocated to this license ID. The number of User rights-to-use cannot exceed the number user rights-to-use assigned to the license ID. Press the Save icon to save the record. Close the ILM-License Mapping form. 	◆ If the license type is a floating license, the system will decrement 1 from the user rights-to-use remaining from the Entitlement ID and increments 1 from the user rights-to-use allocated.

Note: To move to the next field, use either the TAB key or the Mouse. The Enter key will not move the cursor to the next field.

Table 27.5.3-2. Procedure to Add New License and Allocate It to a Machine (2 of 2)

Perform	Action		Expected Result
Adding additional host to the license	 while the ILM-License form is on the displayed, Find the license of interest Press the "Add Adiitional Host" button on the bottom of the form to add additional host to the license ID. Enter the additional Host Name, Host ID, and Site. Press the Save icon to finish adding additional host to the license, OR Press the "Add Additional Host to License" button to add additional hosts to the license ID. Close the ILM-Additional Host form when finished adding all the additional hosts. 	•	The ILM-Additional Host form is displayed. See section 27.5.5 for more information about the ILM-Additional Host form. Additional hosts are added to the license.

Note: To move to the next field, use either the TAB key or the Mouse. The Enter key will not move the cursor to the next field.

More over, there are two pre-defined reports that were designed specially for this form. The license allocation by host report lists license allocations, sorted by host name and ECS part alias and the license allocation by product report lists license allocations for licensed software products, sorted by product, version, and host name. Table 27.5.3-4 provides instructions on how to run these reports. Refer to Figure 27.5.3-4 and 27.5.3-5 for the report layouts.

Table 27.5.3-3. Procedures to Generate ILM-License Predefined Reports

Perform	Action		Expected Result
Navigate to the ILM- License Form	At the Remedy-ILM PC, ◆ File -> Open -> ILM-License -> Search	•	ILM-License Entitlement form is displayed.
Run License Allocation by Host Report	 Tools - > Reports -> License Allocation By Host When the ILM-DIA-Lic Report form is displayed (see Figure 27.5.3-3), select or enter a site name, and/or enter the ECS Alias. Leaving the Site and the ECS Alias values blank will select all licenses in the database. Press the "Run Report" button to start running the report. Press on the "Report Preview" to bring up the report layout. When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. Close the report preview. 	•	The License Allocation by Host Report is displayed. See Figure 27.5.3-4 for the report layout.
Run License Allocation by product Report	 Tools - > Reports -> License Allocation By Product ◆ When the ILM-DIA-Lic Report form is displayed (see Figure 27.5.3-3), enter the ECS Alias. Leaving the Site ECS Alias values blank will select all licenses in the database. ◆ Press the "Run Report" to start running the report. ◆ Press on the "Report Preview" to bring up the report layout. ◆ When the report is displayed, user has the option to either print the report by pressing the print icon or export the report into a file by pressing the Export Icon next to the print icon. ◆ Close the report preview. 	•	The License Allocation by Product Report is displayed. See Figure 27.5.3-5 for the report layout.

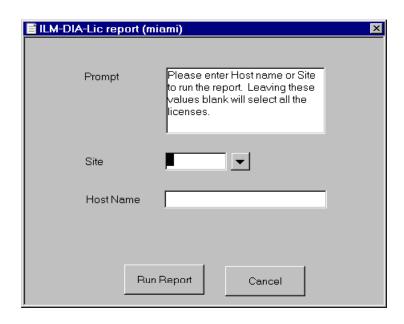


Figure 27.5.3-3. ILM-DIA-Lic Report GUI

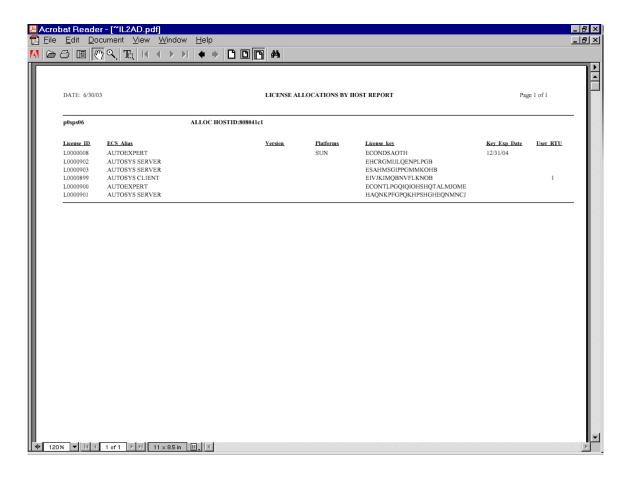


Figure 27.5.3-4. License Allocation By Host Report GUI

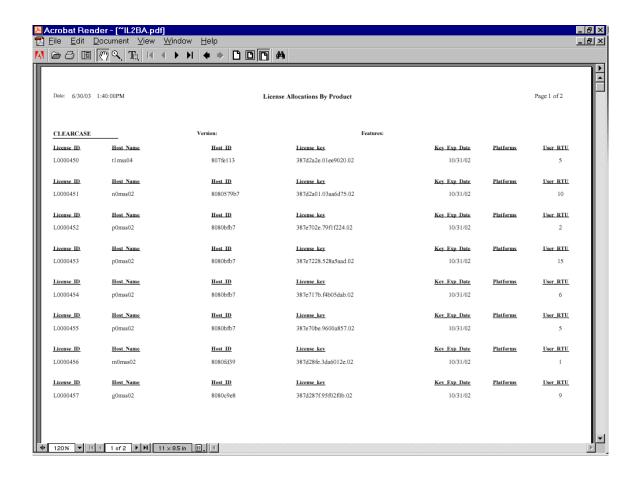


Figure 27.5.3-5. License Allocation By Product Report GUI

27.5.4 ILM-License Mapping GUI

The ILM-License Mapping form (Figure 27.5.4-1) manages the mapping of a license to purchased entitlements and specifies how many node and/or user rights-to-use the license is consuming from each. The form ensures that:

- a) The rights-to-use attributed to an entitlement do not exceed the entitlement's rights remaining;
- b) The sum of the rights being attributed to all entitlements do not exceed the rights-to-use for the license.

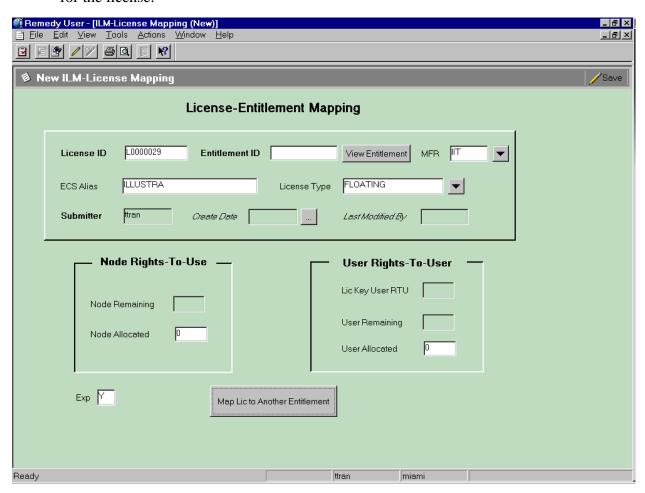


Figure 27.5.4-1. ILM-License Mapping GUI

Table 27.5.4-1 describes the fields on the ILM-License Mapping form.

Table 27.5.4-1. ILM-License Mapping Field Descriptions

Field Name	Data Type	Size	Entry	Description
License ID	Char	10	System Supplies	Unique designator for a license.
Entitlement ID	Char	10	Required	Identifier for a purchased license entitlement.
ECS Alias	Char	40	System supplied	Common name used in ECS for the licensed product and all its versions and variants.
License Type	Char	16	System supplied	Classification that distinguishes among licenses according to rules of use.
MFR	Char	6	System supplied	Code for the manufacturer from whom the item was purchased. in the field above.
Lic Key User Rtu	Numeric	8	System supplied	Number of users authorized by the license to run the licensed product concurrently on a single network. This value limits the user rights-to-use that can be recorded in the license's allocation records.
Remain	Numeric	8	System supplied	Quantity of node or user rights under a license entitlement not yet consumed by the mapping of licenses to the entitlement.
Allocated	Numeric	8	Optional	Number of node or user rights-to-use to be counted under the entitlement as having been consumed by the license. The value may not exceed the current value plus the rights remaining under the entitlement.
Submitter	Char	30	System- supplied	The user that created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user who last modified the record.

27.5.5 ILM-Additional Host GUI

The ILM-Additional Host form (Figure 27.5.5-1) is used for maintaining records about backup or redundant license servers for machines to which a license has been allocated. Identifying additional hosts has no effect on calculations of entitlements node or user rights-to-use consumed or remaining, but is useful for tracking where redundant licenses are supposed to be or may be installed.

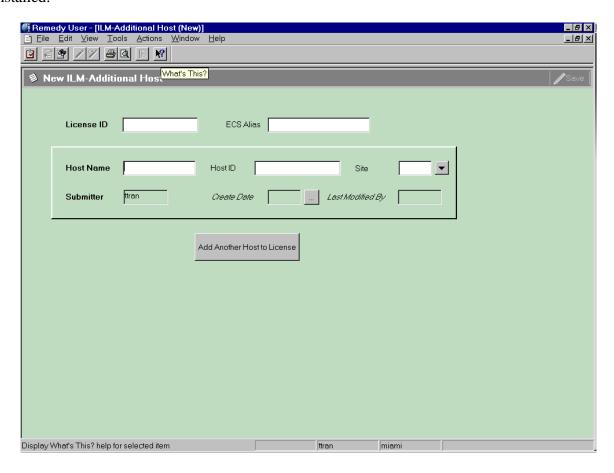


Figure 27.5.5-1. ILM-Additional Host GUI

Table 27.5.5-1 describes the fields on the ILM-Additional Host form.

Table 27.5.5-1. ILM-Additional Host Field Descriptions

Field Name	Data Type	Size	Entry	Description
License ID	Char	10	System Supplied	Unique designator for a license. Derived from the displayed license.
ECS Alias	Char	30	System Common name used in ECS for the license product and all its versions and variants.	
Host Name	Char	30	Optional	ECS name of a machine that is a backup or redundant license server for the one to which the license is principally allocated.
Host ID	Char	20	Optional	Host id of a machine that is a backup or redundant license server for the one to which the license is principally allocated.
Site	Char	6	Optional	Code for the site to which the license is allocated.
Submitter	Char	30	System- supplied	The user that created the record.
Create Date	Date		System- supplied	Date the record was created.
Last Modified By	Char	30	System- supplied	The user who last modified the record.

27.6 System Administrator Functions

27.6.1 ILM-System Parameters

The ILM-System Parameters form (Figure 27.6.1-1) is for maintaining system-wide Remedy-ILM parameters and is principally used for initializing certain identifier fields.

Several fields have particular significance for ILM. The Site ID field contains the code for the ECS site where the operator's copy of Remedy is installed. The field is interrogated by ILM processes that have to determine which assets belong to the local site.

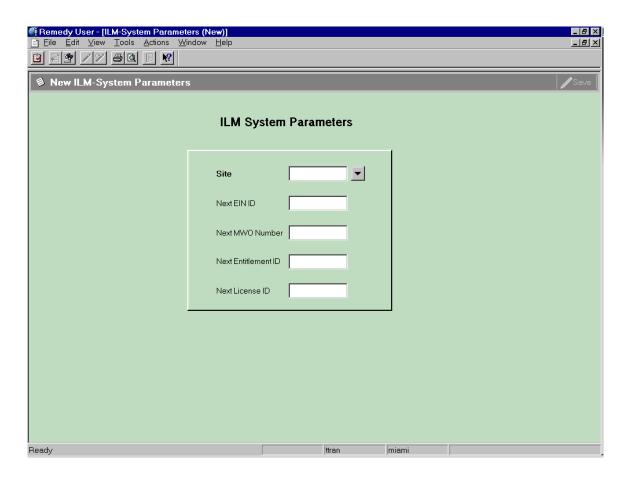


Figure 27.6.1-1. ILM-System Parameters GUI

Table 27.6.1-1 describes the fields on the ILM-System Parameters form.

Table 27.6.1-1. ILM-System Parameters Field Descriptions

Field Name	Data Type	Size	Entry	Description
Site	Char	6	Required	Code that identifies the ECS site where this Remedy system is installed.
Last EIN	Char	20	System- supplied, but modifiable	Code used in determining the next sequentially- available identifier when assigning EIN numbers automatically.
Last MWO	Char	10	System- supplied, but modifiable	The last MWO number used.
Last Entitlement ID	Char	10	System- supplied, but modifiable	The last entitlement id used.
Last License ID	Char	10	System- supplied, but modifiable	The last license id used.

27.6.2 Inter-Site Data Exchange

Inter-site data exchange processes are executed on a daily basis to transfer EDF ILM data to other locations and to retrieve Maintenance Work Order data from the DAACs. Remedy export specific data to files, and supporting scripts/applications distribute these files to remote sites. These files contain centrally-managed ILM records that have changed since the last time this function was run. Only records about inventory items at the site are to be exported.

Remedy analyzes the following forms to determine what data changed and which records were affected: EIN, EIN Structure, OEM Parts, Vendor-MFR, Maint Contract, hardware_software codes, Status Code, MWO, MWO Line Item, License Products, License Entitlement, License, License Mapping, and Additional Host. Remedy selects changed records by site, then dumps their data into files compatible with Remedy's Import utility. Data files are combined into one tar file per site. Each tar file is given a name that identifies the date and time the export was done, the origination site, and the destination site. These files are placed in the export directory at the EDF.

27.6.3 DAAC Data Export

DAACs data export functions are similar to EDF. The biggest different is DAACs export only the maintenance work orders data changes. The two forms that contain maintenance work order data are the ILM-MWO and ILM-MWO Line Item forms.

Remedy analyses the ILM-MWO and the ILM-MWO Line Item forms to determine what data changed and which records were affected. It copies those records to files that are compatible with the Remedy's Import records utility. These two files are tarred into one tar file. The tarred file is given a name that identifies the date and time the export was done, the origination site, and forEDF. The exported file is placed in the export directory at the local site.

27.6.4 DAAC Data Import

Data import is done on a routine basis at each site. Remedy performs the data import at a specified time interval. At 1:00 AM every working day, the DAACs use Putty's pscp application to secure copy the exported file from the EDF export directory to the DAAC's Remedy PCs. When finished copying the file to the local Remedy PC, the DAACs move the EDF exported files to the EDF export archive directory. At the local Remedy PC, the copied file is untarred by using Winzip and then imported into the appropriate forms by using Remedy's Import utility.

27.6.4.1 EDF Data Import

EDF follows the same processes to import maintenance work order changes from the DAACs. At 3:00 AM every working day, EDF's Remedy PC uses Putty's pscp to secure copy the DAACs exported file from the DAAC's export directory to the EDF's Remedy PC. The import script uses Winzip to untar the file and finally imports the work order changes into Remedy-ILM at the EDF.

27.6.5 User GUI

The User form, shown in Figure 27.6.5-1, is used by the administrator to add, modify, or remove users from the Action Request (AR) System. The "User" form is used in conjunction with the "Group" form to provide users with permissions ultimately determining which operations individual users can perform and which forms and fields they can access. For more information on the "User" form and the AR System access control, refer to the Action Request System Server Administrator's Guide.

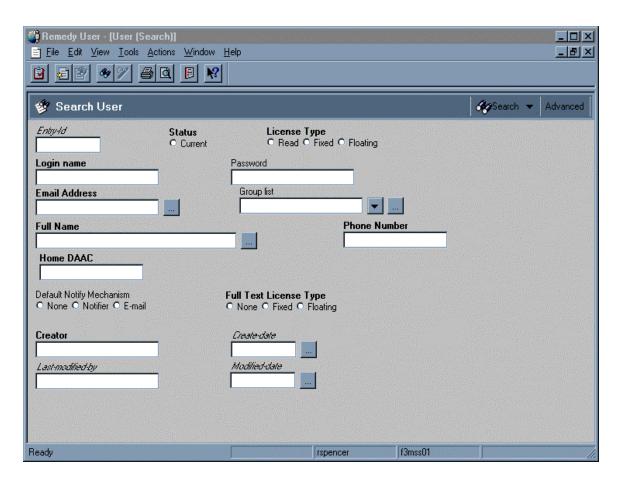


Figure 27.6.5-1. User GUI

Table 27.6.5-1. User Form Field Descriptions

Field Name	Data Type	Size	Entry	Description
Entry-Id	Character	15	System generated	Entry ID of user
Status	Selection	*	Required	Is user current or not as shown by the "current" button
License Type	Selection	*	Required	What type of license does this user have? (e.g., read, fixed, floating)
Login name	Character	30	Required	Login name of user
Password	Character	30	Optional	Password of User
Email Address	Character	255	Required	E-mail address of User
Group list	Character	255	Optional	Groups to which the user belongs
Full Name	Character	128	Required	Full Name of User
Phone Number	Character	55	Required	Phone Number of User
Home DAAC	Character	55	Required	Home DAAC of User
Default Notify Mechanism	Selection	*	Optional	Notification method (e.g., None, Notifier, and Email buttons)
Full Text License Type	Selection		Required	Not applicable
Creator	Character	30	Required	Person who created the user account
Create-date	Date/Time	17	System generated	Date and time the entry was created at the present site (mm/dd/yy hh:mm:ss)
Last-modified-by	Character	30	System generated	User ID of person that last modified the user entry
Modified-date	Date/Time	17	System generated	Date and time of last modification to user entry (mm/dd/yy hh:mm:ss)

^{*}Note, the size of a field with a "selection" data type can vary and the size is automatically adjusted to the size of the item selected from the selection list.

27.6.6 Remedy's Admin Tool GUI

The Remedy Administrator Tool is the tool one uses to create, modify, and delete Remedy objects (e.g. forms and menus). Figure 27.6.6-1 shows the main Administrator Tool GUI and its starting screen, the server window, and the workflow objects categories.

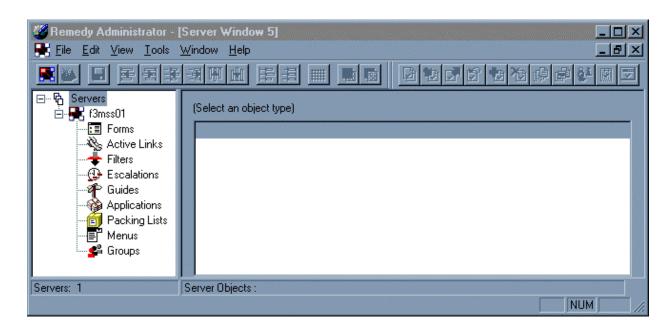


Figure 27.6.6-1. Admin Tool GUI

Table 27.6.6-1 provides a description of the Admin Tool GUI Workflow objects. For more information on these options, see *Remedy's Action Request System Administrator's Guide*, Vol. 1, Chapter 4, and/or the Remedy Administrator Tutorial using the Administrator Tool's Help menu.

Table 27.6.6-1. Admin Tool GUI, Workflow Object Descriptions

Workflow Object	Size	Entry	Description
Forms	Variable	System Generated	List of available forms.
Active links	Variable	System Generated	List of available active links.
Filters	Variable	System Generated	List of available filters.
Escalations	Variable	System Generated	List of available escalations.
Guides	Variable	System Generated	List of available guides.
Applications	Variable	System Generated	List of available applications.
Packing lists	Variable	System Generated	List of available packing lists.
Menus	Variable	System Generated	List of available menus.
Groups	Variable	System Generated	List of available groups.

27.6.7 Databases

Remedy's Action Request System uses a Sybase database called AR System. Tables and columns are created, modified, and deleted when forms are built and edited. This is all done automatically and is invisible to the user.

27.6.8 Special Constraints

Note that while ILM forms are open to all operators, and operators have view privileges to the user form, only system administrators have the ability to modify forms and tools presented in this section. Privileges are set according to DAAC policy.

27.6.9 Event and Error Messages

For Remedy's Action Request System's system messages see the *Action Request System Error Messages Guide*.

Table 27.6.9-1 lists non-system failure related messages which appear on the operator's screen.

Table 27.6.9-1. Non System-Failure Related Error Messages (1 of 5)

Error Message Char	Cause	Action					
Inventory Management							
Parent EIN does not exist. Enter the correct Parent EIN.	Attempting to associate a component EIN to a Parent EIN that does not exist.	Enter the correct Parent EIN.					
Parent EIN, \$Parent EIN\$, is a component. Please enter the correct Parent EIN number.	Attempting to associate a component EIN to a Parent EIN that is a component to another EIN Structure.	Enter the correct Parent EIN.					
Parent EIN, \$Parent EIN\$, is not hardware. Enter the correct Parent EIN!	Attempting to associate a component EIN to a Parent EIN that is not hardware.	Enter the correct Parent EIN.					
Part not found. Add new part into the part table or enter the correct part no.	Attempting to enter a part no that does not exist in the database.	Enter the correct Part No into the ILM-OEM Parts form or enter the correct part no.					
Part Number, \$Part No\$, already exists. Enter the correct Part Number!	Attempting to add a new Part No enter the ILM-Oem Parts form where the Part No already existed in the form.	Enter the correct Part number.					
EIN is a component to Parent EIN. Update the Parent EIN's ECS name instead.	Attempting to update an ECS Name of a component EIN.	Update the Parent EIN's ECS Name.					
New Parent EIN is the same as the old Parent EIN. Enter the correct new Parent EIN.	Attempting to relocate to relocate an item to the same Parent EIN.	Enter the correct New Parent EIN.					
EIN already existed. Enter the correct EIN.	Attempting to create a new EIN that is already existed in the database.	Enter the correct EIN number.					

Table 27.6.9-1. Non System-Failure Related Error Messages (2 of 5)

	Table 27.0.9-1. Non System-Failure Related Error Messages (2 of 5)				
Error Message Char	Cause	Action			
A record for Location, \$Location\$, with Building, \$Building\$, already exists. Enter the correct Location and its associated Building!	Attempting to create a new location in the ILM-Inventory location form where the combination of location and building values already existed in the form.	Do not enter the new location and use the existed one.			
EIN (\$EIN\$) is a Parent to EIN (\$EIN is Parent\$). Cannot assign a Parent to another Parent structure.	Attempting to assign a Parent EIN as a component to an EIN structure.	Verify the Component EIN and the Parent EIN.			
Audit Date (\$Audit Date\$) cannot be greater than current date. Enter the correct audit date.	Attempting to update the audit date to a date greater than the current date.	Enter the correct audit date.			
Receive Date (\$Receive Date\$) cannot be greater than the current date (\$DATE\$). Enter the correct receive date.	Attempting to update the receive date to a date greater than the current date.	Enter the correct receive date.			
Vendor ID, \$Vendor ID\$, already exists. Enter the correct Vendor ID!	Attempting to add a new vendor id that already existed in the ILM-Vendor-MFR form.	Use the existing Vendor ID if the vendor name is the same. If the vendor name is not the same, use another code to define the new vendor.			
Site, \$Site\$, already exists. Enter the correct Site!	Attempting to add a site code that already existed in the ILM-Site form.	Use the existing site code.			
Item Status, \$Item Status\$, already exists. Enter the correct Item Status!	Attempting to add a new item status that already existed in the ILM-Status Code form.	Enter the correct item status.			
EIN Transactions					
Parent EIN field is a required. Enter a Parent EIN value into the Parent EIN field.	Attempting to perform an EIN transacion where the Parent EIN value is not provided in the Parent EIN field.	Enter the correct Parent EIN value into the Parent EIN.			
Parent EIN (\$Parent EIN\$) does not exist. Enter the correct Parent EIN.	Attempting to perform an EIN transaction on the Parent EIN where the Parent EIN does not exist in the ILM-EIN form.	Enter the correct Parent EIN.			
Parent EIN, \$Parent EIN\$ is a component of Parent EIN \$Temp Parent Parent\$. Perform transaction on the Parent EIN, \$Temp Parent Parent\$ instead.	Attempting to perform an EIN transaction on a component.	Enter the correct Parent EIN.			
One or more of these fields is not completed (Archive (P)arent-(C)omponent and Archive Type. Enter values into both of these fields and execute the transaction again.	Attempting to perform an archive transaction where the Archive (P)arent-(C)omponent and/or Archive Type fields is not completed.	Complete both of these fields.			

Table 27.6.9-1. Non System-Failure Related Error Messages (3 of 5)

Error Message Char	Cause	Action
New Parent EIN is a component to Parent EIN (\$Temp New Parent Parent\$). Enter another New Parent EIN.	Attempting to relocate component(s) to a new Parent EIN where the new Parent EIN is a component to another EIN Structure.	Enter the correct new parent EIN.
New Parent EIN does not exist. Enter another New Parent EIN.	Attempting to relocate component(s) to a new parent EIN where the new parent EIN does not exist in the ILM-EIN form.	Enter the correct new parent EIN.
New Parent EIN (\$New Parent EIN\$) is not hardware. Enter another New Parent EIN value.	Attempting to relocate component(s) to a new parent EIN where the new parent EIN is something else other then hardware.	Enter the correct new parent EIN.
New Parent EIN (\$New Parent EIN\$) is the same as the old Parent EIN. Enter another new Parent EIN.	Attempting to relocate component(s) to a new parent EIN where the new parent EIN is the same as the old parent EIN	Enter the correct new parent EIN.
New Location values (New Location, New Building, or New Room) are not completed. Complete all the new locatioon values.	Attempting to perform a transaction where all the new location values are not completed.	Make sure all the new location values are completed.
Maintenance Work Order		
Parent EIN (\$Parent EIN\$) does not exist. Enter the correct Parent EIN.	Attempting to create a new maintenance work order where the Parent EIN does not exist in the ILM-EIN form.	Enter the correct Parent EIN.
EIN, \$Parent EIN\$, is not a parent. Enter the correct Parent EIN!	Attempting to create a new MWO where the parent EIN entered is a component of some EIN structure.	Enter the correct parent EIN.
ALDT 1 End Date-Time (\$ALDT End Date-Time\$) cannot be greater than current date.	Attempting to enter an ALDT End Date-Time that is greater than the current date and time.	Enter the correct ALDT End date-time.
Notification Date (\$Notification Date-Time\$) cannot be greater than current date.	Attempting to enter a notificcation Date-Time that is greater than the current date and time.	Enter the correct notification date-time.
Vendor Complete Date-Time (\$Vendor Complete Date-Time\$) cannot be greater than current date.	Attempting to enter a vendor complete Date-Time that is greater than the current date and time.	Enter the correct vendor complete date-time.
Vendor Call Date-Time (\$Vendor Call Date-Time\$) cannot be greater than current date.	Attempting to enter an vendor call Date-Time that is greater than the current date and time.	Enter the correct vendor call date-time.
ALDT Start Date-Time (\$ALDT Start Date-Time\$) cannot be greater than current date.	Attempting to enter an ALDT start Date-Time that is greater than the current date and time.	Enter the correct ALDT start date-time.

Table 27.6.9-1. Non System-Failure Related Error Messages (4 of 5)

Table 27.0.9-1. Non System-Fanure Related Error Wessages (4 of 5)				
Error Message Char	Cause	Action		
Failure Date (\$Failure Date- Time\$) cannot be greater than current date.	Attempting to enter a failure Date- Time that is greater than the current date and time.	Enter the correct failure date-time.		
Vendor Arrive Date-Time (\$Vendor Arrive Date-Time\$) cannot be greater than current date.	Attempting to enter a vendor arrive Date-Time that is greater than the current date and time.	Enter the correct vendor arrive date-time.		
Vendor Initial Response Date- Time (\$Vendor Initial Resp Date- Time\$) cannot be greater than current date.	Attempting to enter a vendor initial response Date-Time that is greater than the current date and time.	Enter the correct vendor intial response date-time.		
The MWO must already be created and you must have the MWO displayed in a Search/Modify window before clicking the Add Fail-Replacement Component Button!	Attempting to add a new work order line item where the work order information is blank.	Use the ILM-MWO form to find the appropriate work order and press the "Add Fail-Replacement Component" button to start adding line items to that work order.		
Component EIN is the same as the MWO Parent EIN. Enter the correct component EIN.	Attempting to add a work order line item where the component EIN is the same as the MWO's Parent EIN.	Enter the correct component EIN.		
New Parent EIN is the same as the MWO's Parent EIN. Enter the correct New Parent EIN.	Attempting to add a work order line item to move a component to a new EIN structure where the new parent EIN is the same as the MWO's Parent EIN.	Enter the correct new parent EIN value.		
New Parent EIN (\$New Parent EIN\$) is a component to Parent EIN (\$New Parent EIN Parent\$). Enter the correct New Parent EIN value	Attempting to add a work order line item to move a component to a new EIN structure where the new parent EIN is the same as the MWO's Parent EIN.	Enter the correct new parent EIN value.		
New Parent EIN does not exist. Enter the correct New Parent EIN.	Attempting to add a work order line item to move a component to a new EIN structure where the new parent EIN does not exist in the ILM-EIN form.	Enter the correct new parent EIN value.		
New Parent EIN is not hardware. Enter the correct New Parent EIN value.	Attempting to add a work order line item to move a component to a new EIN structure where the new parent EIN in not hardware.	Enter the correct new parent EIN value.		
Component EIN is a parent. Enter the correct Component EIN value.	Attempting to add a work order line item where the component EIN is a parent.	Enter the correct component EIN value.		
Line Item does not have the correct event type and maint code. Enter the correct event type and maint code.	Entering the incorrect combination of event type and maint code in the ILM-MWO Line Item form.	Enter the correct event type and maint code.		

Table 27.6.9-1. Non-System-Failure Related Error Messages (5 of 5)

Error Message Char	Cause	Action		
License Management				
Entitlement Part No. does not exist. Enter the correct part number or add the new part into the ILM-License Entitlement Part form.	Attempting to associate entitlement with an Entitlement Part No. that does not exist in the ILM-License Entitlement Form.	Enter the correct part number or add the new part into the ILM-License Entitlement Part form.		
Contract ID, \$Contract ID\$, already exists. Enter the correct Contract ID!	Attempting to associate a license entitlement with a contract ID where the contract id does not exist in the ILM-Maint contract form.	Enter the correct contract ID.		
Entitlement ID does not exist. Enter the correct Entitlement ID.	Attempting to map a license to a purchased entitlement that does not exist in the ILM-Entitlement form.	Enter the correct Entitlement ID.		
Node allocated is greater than Node remaining. Reduce number of Right-To-Use or enter another Entitlement ID.	Attempting to map a license to an entitlement where the entitlement node remaining is less than the amount allocating.	Reduce the number of node allocated.		
User Allocated is greater than License Key User RTU allocated to the license. Enter the correct User Allocated value.	Attempting to map a license to an entitlement where the user allocated is greater than the license key user rights-to-use.	Reduce the user allocated to equal to or less than the license key RTU.		
User Allocated is greater than User RTU Remaining. Lower User Allocated or Enter another Entitlement ID.	Attempting to map a license to an entitlement where the user allocated is greater than the entitlement user rights-to-use remaining	Reduce the user allocated.		
This license right-to-use had already been mapped to entitlement \$Ent ID Holder\$.	Attempting to map a node lock license to more than one entitlement.	Do not map the license to another entitlement.		
Total user allocated (\$Total User Allocated\$) is greater than the lic key user RTU. Reduce number of User Allocated	Attempting to map a license to entitlements where the total user allocated is greater than the license key user rights-to-use.	Reduce the user allocated to equal to or less than the license key RTU.		
Node allocated or User allocated has not been assigned to this Entitlement ID (\$Entitlement ID\$).	Attempting to map a license to an entitlement where the user did not enter any value in the Node or user allocated.	Enter node or user allocated to map against the entitlement.		
Node Allocated cannot be greater than one for nodelock licenses. Enter 1 to allocate 1 Right-To-Use for this Nodelock license.	Attempting to allocate more than 1 node rights-to-use for a node lock license.	Reduce the number of node rtu allocated to 1.		
Combination of Entitlement Part No-MFR and Version \$Temp PN_MFR_Ver\$ already existed. Enter the correct Entitlement Part No.	Attempting to add a new entitlement part into the ILM-License Products form where the combination of the Entitlement Part No, MFR, and version already existed in the database.	Use the existing entitlement part information.		

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28. Maintenance of Configuration Parameters

This chapter concerns the maintenance of configuration parameters that ECS servers access when they are started. The configuration parameters are manageable through a Configuration Registry. The Configuration Registry Server provides a single interface to retrieve configuration attribute-value pairs for ECS servers from the Configuration Registry Database, via a Sybase Server. The Configuration Registry Server maintains an internal representation of the tree in which configuration attribute-value pairs are stored. General configuration parameters used by many servers are stored in higher nodes in the tree. Parameters specific to a single ECS server are contained in the leaf nodes of the tree. ECS provides a script tool to load the Configuration Registry database from data in configuration files. This loading is a one-time event to populate the Registry database with the information contained in .CFG files. Once the Configuration Registry is loaded, if the configuration files are moved, renamed, or otherwise made inaccessible to the software, the software goes to the Configuration Registry to obtain needed configuration parameters. There is also a Configuration Registry GUI to view and edit configuration data in Changes to the Configuration Registry are typically under the control of the database. Configuration Management and the Database Administrator.

28.1 Parameter Change Control Procedure

Configuration parameters are 'controlled' by either DAAC or the EDF. Proposed changes to these configuration parameters originate from the controller of these parameters, in most cases. The one exception is when new ECS software/hardware patches or versions warrant new configuration parameters, or changes to the existing parameters. In cases where one of the entities, i.e., DAAC or EDF, proposes a change to an existing configuration parameter which it does not control, then the requesting entity follows the appropriate ECS change request, resolution and CCB approval process of the entity that controls that parameter. The ECS configuration change request process is described in Chapter 9.

Configuration Parameter Baseline documents define information on various areas of ECS. These areas include, but are not limited to the following:

- ECS Custom Code configuration, program and application configuration files and parameters.
- Sybase Server Databases.
- Operating System build, options of auto mount, and Kernel configuration files and parameters
- COTS configuration files and parameters.

The information captured is site- and host-specific, wherever applicable. Whenever possible the following 'types' of information are captured:

- Configuration parameters and files.
- Definitions and descriptions of parameters.
- ECS recommended value.

- Value or value ranges; i.e., common range across multiple DAACs or DAAC-specific range.
- Impacts associated with changing a parameter.
- Controlling entity of the parameter (i.e., DAAC or EDF).

The baselined documents are maintained by ECS CM, and are posted on the ECS Baseline Information System (EBIS) Site. The baselined information is replicated and posted on a mirror site for DAACs' accessibility and review.

All changes to ECS software/hardware patches and versions are controlled by the relevant CCBs. (Refer to Chapter 9.)

A prototype (non-baselined) version of the configuration information may be posted on the EBIS and mirror site for ECS and DAAC review prior to the CCB approval process, as long as the posted information is clearly identified as 'prototype' to distinguish it from the ECS baselined information.

28.2 Overview of Configuration Parameter Files

Various types of source files are used to modify the configuration parameters at the Landover functionality labs and at the DAACs. These are as follows:

- The 'Mkcfg' scripts contain persistent values of configuration parameters, and only ECS developers are allowed to modify them.
- The '.cfgparms', '.extparms' and '.dbparms' files, which are resident in Clearcase and contain persistent values of configuration parameters for the EDF. The delivered version of these files to the DAACs contain DAAC specific and mode specific values. The .cfgparms files hold parameters used to generate the standard .CFG files. The .extparms files contain parameters to generate non-standard (or extension)files, and are not used by most subsystems. The .dbparms files hold parameters used in database operations.
- The .cfgparms file patches the .cfgparms, .extparms and .dbparms. Changes are from one version to another, e.g., 6A.01 to 6A.02.
- The '.rgypatch' file patches the registry database.

28.3 Overview of Configuration Registry

The Registry Database is initially created with parameters from the .CFG files that are generated by running ECS Assistant's mkcfg process. In future other files such as the .PCFG and .ACFG files may be housed in the registry database. A .rgypatch file is required to make a change (i.e., to add, update or delete a parameter) to a registry configuration parameter. Another method of making changes to the parameters in the registry is to use the Registry GUI.

ECS servers use a single class to access. CFG files. This class was modified to request values from the registry servers, if there is no .CFG file present. The registry server then obtains the requested values from the registry database, and returns them to the requester. It is important to note that the registry server provides read-only access to the configuration parameters, and caches non-leaf nodes. Therefore changes made via the GUI which is mode specific, do not take

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effect until the affected servers have been restarted. If a non-leaf node is added, deleted, or updated, the changes do not take affect until the registry server has been restarted and then the affected servers have been restarted.

The registry schema contains provision for Access Control List (ACL) processing. This restricts read and write privileges. For example, the write privileges of the registry in the OPS mode could be granted to individuals in a supervisory role, while read privileges could be non-supervisory.

28.3.1 Registry Deployment and Baseline Maintenance

Registry changes can be made by anyone having the DBO privileges. Any changes to the configuration parameter baseline, such as addition, deletion or modifications of parameters, should follow the respective CCB process.

ECS servers use the .CFG files, if present in /usr/ecs/<mode>/CUSTOM/cfg directory when the server is started. Otherwise the ECS servers use the registry database for configuration parameters. Therefore, moving or renaming the .CFG files causes servers to use the registry the next time they restart. This allows the registry to be brought online, and taken offline on a server-by-server basis.

Maintenance of parameters in the registry must be via the registry GUI or via database patches. Changes to the .CFG files or the .cfgparms files will not result in changes to the registry unless the files are re-imported into the registry. The ability to create .CFG files during the "make config" phase of ECS Assist processing can be switched off (via a configuration parameter). The addition, deletion and modification of values in the registry are achieved either by the GUI or by a database patch script.

The EDF maintains the "baseline" registry database that is used to generate the database patches. The baseline registry database has the structure of a generic DAAC, using functional host names rather than actual host names. It contains the master values of parameters owned by the EDF, and contains null values for parameters owned by the configuration management process. ECS developers make changes to the baseline database via the software configuration management process. The database contains an attribute tree for each release, and release patch supported by the EDF. Prior to a release or a release patch, a configuration patch script is created by comparing the tree for the new release with the tree for the release being replaced. The patch script contains a series of add, update and delete statements, tagged to indicate the sites they pertain to. The primary purpose of the patch is to enhance the process of parameter additions, modifications or deletions to the DAAC configuration. The patch is also used to propagate value changes for parameters owned by the EDF.

28.4 Configuration Registry Procedures

28.4.1 Registry Preparation Procedure

Create a new Registry Tree for the mode to be installed:

- 1 Ensure that the registry database has been backed up.
 - For detailed instructions refer to Section 28.4.2, **Registry Database Backup Procedure**.
- 2 Start the registry GUI for the mode into which the required Drop is being installed.
- 3 Select the attribute tree name that is mapped to the current mode from the drop-down menu
 - When the correct tree is selected, the name of the mode should appear in the "Attribute Information" box below).
- 4 Click on the name of the attribute tree in the window below (the window with a white background), to enable the menu icons.
- 5 Click on the Copy selected item icon (the icon on the left).
- 6 Enter the name of the new registry tree in the **Attribute Name** box.
- 7 Select the **Ok** button.
- **8** Wait for the new tree to be created.

NOTE: It may take a long time for the new tree to be created -- on the order of 30 minutes).

- 9 Select the newly-created tree name in the window.
- 10 Click on the MAP icon.
- 11 Select the mode name from the drop-down menu in the new window that appears.
- 12 Select Ok.
- Exit the GUI by selecting the File \rightarrow Exit menu option.

28.4.2 Registry Database Backup Procedure

The Registry database should be regularly (e.g., nightly) backed up via the Sybase dumps. (The DAACs should have added the registry db to their list of dbs for backup).

1 To make a backup copy of a tree within the registry, just click on the "copy" in the registry GUI before making modifications to the tree.

- To make a backup copy of a tree and dump it to a file first click on **Add New Tree** at the bottom of the tree display in the GUI.
- 3 Select the MkRgyPatch option from the menu
- 4 Specify the new tree (which is empty) and the tree that you want to copy.
 - This produces a file containing the tree in the rgypatch format.

28.4.3 Registry Patch Procedure

Patch the Registry Database using the **.rgypatch** file:

- 1 From the ECS Assist Subsystem Manager, select the appropriate Mode, Subsystem, and Component from the main window.
- 2 Select **Registry Data Patch** from the **Tools** menu.
 - An Apply Registry Data Patch window is displayed.
- In the **Apply Registry Data Patch** window enter the name of the SQL server in the **Registry Database Server:** box.
- 4 Enter the registry database DBO ID.
- 5 Enter the registry database password.
- In the **Registry DB Name:** box enter the name of the registry database (**EcCsRegistry <mode>**) and press the **ENTER** key.
 - ECS Assist connects to the registry database and populates the drop-down menu associated with the next field (**Tree to patch:**).
- 7 Use the drop-down menu to select the appropriate registry tree that is being patched.
 - If unsure which tree to select, bring up the registry GUI and verify which tree is mapped to the mode being updated.
- 8 Click on the **Select Patch File** button to bring up the **File Selection Dialog** window.
- 9 Navigate through this window to find the .rgypatch file.
 - If the installation was successful, it should appear in the /usr/ecs/<MODE>/CUSTOM/.installed/DMS directory).
- Highlight the .rgypatch file in the window and select **OK**.

- Verify that the appropriate information is indicated in the **Patch File:** box in the **Apply Registry Data Patch** window and select **OK**.
 - At this point, the registry patch will be applied.
- Monitor the output via ECS Assist for any warning or error messages as the patch is run.

28.4.4 Display Parameters Using the Configuration Registry GUI

Display parameters using the Configuration Registry GUI:

- 1 On workstation x0dms##, at the UNIX prompt in a terminal window, type /usr/ecs/mode/CUSTOM/utilities/EcCsRegistryGUIStart mode & at a UNIX command prompt and then press the Return/Enter key (where mode is likely to be TS1, TS2, or OPS).
 - NOTE: The x in the workstation name will be a letter designating your site: g = GSFC, m = SMC, l = LaRC, e = EDC, n = NSIDC, o = ORNL, a = ASF, j = JPL; the ## will be an identifying two-digit number (e.g., g0dms03 indicates a data management subsystem workstation at GSFC). If you access the workstation through a secure shell remote login (ssh), you must enter setenv DISPLAY <local_workstation IP address>:0.0 prior to the ssh before entering the command after the ssh. The <ipaddress> is the ip address of x0mss##, and xterm is required when entering this command on a Sun terminal.
 - The Database Login window is displayed with entries filled in for **User Id:** (e.g., **EcCsRegistry**), **Server:** (e.g., **x0icg02_srvr**), and **DB Name:** (e.g., **EcCsRegistry** *mode*).
- In the Database Login window, click in the **Password:** field and type the password.
 - The typed password is not displayed (dots are displayed in place of the password).
- 3 Click on the **Sign On** button.
 - The Database Login window is closed and the Configuration Registry GUI is displayed.
- 4 On the tree showing system hosts displayed on the left side of the GUI, click on the "+" sign next to one of the hosts for which parameters are to be displayed.
 - The tree displays a **config** branch.
- 5 Click on the "+" next to **config**.
 - The tree displays a **CFG** branch.
- 6 Click on the "+" next to CFG.
 - The tree displays the computer software components for the selected host.

- 7 Click on one of the listed components (or its folder icon).
 - The **Attribute Listing** field displays the configuration parameters associated with the selected component. If there are a large number of parameters, the right side of the window will have a scroll bar that may be used to scroll down the list.
- **8** Click on one of the listed parameters.
 - The **Attribute Information** pop-up window for the selected parameter is displayed, showing detailed information concerning the parameter.
 - If you are logged in with an account authorized with appropriate permissions, the **Attribute Information** window permits changing or deleting the parameter.
- 9 To exit from the Configuration Registry GUI, follow menu path File→Exit.

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Appendix A. Additional Material

Examples of the Various ODL Files Used by Each Instrument Team

Section 26.13 deals, in part, with the use of ODL files in SSI&T activities. This Appendix serves as a supplement and reference for that section. Useful examples of ODL files follow. ODL Template files, from which specific examples were created, are listed first. Then, examples of specific ODL files are listed by instrument (ASTER, MISR, MODIS and AIRS). Please note that in many of the examples that follow, much of the instrument/ECS provided comments have been deleted in order to keep this document reasonably short.

A.1 Template ODL Files

There are five Template ODL files listed here. The specific or tailored ODL files listed in Sections A.2 through A.5 were derived from these templates by appropriate editing and filling-in of values (*NOTE: while the TILE ODL file is currently not being used by any of the instrument teams mentioned above, the template is included here for completeness). The five ODL Template files listed reside, on the AIT Sun host, at /usr/ecs/<mode>/CUSTOM/data/DPS. They are:

PGE_ODL.template ESDT_ODL.template ORBIT_ODL.template TILE_ODL.template* PATHMAP_ODL.template

A.1.1 PGE_ODL.template

```
/*
/*
           TEMPLATE PGE SCIENCE METADATA ODL FILE
/*
/*
                                                   * /
/* The SSIT operator's responsibility is to copy this file over and
                                                                    * /
/* edit it to add all necessary PDPS metadata values.
/*
/* All PGE ODL files must reside in directory $DPAT_PGE_SCIENCE_MD.
/* This directory is now set through the Process Framework CFG files.
/*
/* The operator must add a value to the right of the "=" for each
                                                                    * /
/* parameter.
/*
/* Normally, a template version of this file (without the comments)
                                                                    * /
/* will be generated by the SSIT operator from the PCF delivered to
                                                                    * /
                                                                    * /
/* SSIT. This file is meant to show the SSIT personnel and the
                                                                    * /
/* Instrument teams the information that is needed for a PGE to be
/* planned and executed by the Planning and Data Processing system of
/* ECS.
/*
```

```
/* CHANGE LOG
                                                            * /
/*
      -- Added new schedule type for Data Scheduled PGEs.
                                                            02/18/98
/*
                                                                        * /
               Changed QUERY_DELAY to be optional for all PGEs.
/*
             Changed SPATIAL_KEY_INPUT to KEY_INPUT
/*
      -- Fixed description for Begin/End Period Offsets.
                                                            03/10/98
/*
      -- Added The Distinct Value definition.
                                                           03/26/98
/*
      -- Fixed length of CATEGORY.
                                                      03/27/98
/*
      -- Fixed length of FILETYPE NAME.
                                                            03/31/98
/*
      -- Added PATHMAP NAME
                                                      04/13/98
/*
      -- Changed how WAITFOR is suposed to be set.
/*
            Added entries for ASSOCIATED_SCIENCE_DATA to handle
/*
               BROWSE and QA products.
/*
      -- Added START_OF_MINUTE to PROCESSING_BOUNDARY.
                                                            06/24/98
/*
            Updated DATA DAY values for PGE_PARAMETER_DYNAMIC_VALUE,
/*
               and DATABASE_QUERY
/*
      -- Added KEY_PARAMATER_NAME and KEY_PARAMETER_VALUE
                                                            07/05/98
/*
             for Metadata Checks and Metadata Queries.
                                                                 * /
/*
      -- Updated description for KEY_PARAMETER_NAME and
                                                            07/11/98
/*
            KEY PARAMETER VALUE.
                                                                  * /
/*
      -- Updated lengths for PLATFORM and INSTRUMENT.
                                                            08/13/98
/*
      -- Updated explination for "Already Created Tile"
                                                           08/18/98
/*
             for QUERY TYPE.
/*
      -- Added CHECK_FOR_OUTPUT flag.
                                                            08/24/98
/*
      -- Added MOST_RECENT_QUERY_OFFSET and MOST_RECENT_
                                                            09/02/98
/*
             QUERY_RETRIES parameters for the Most Recent Granule */
/*
               Production Rule.
                                                                  * /
/*
      -- Added AUXILIARY_LOGICAL_ID object for handling_
                                                            09/23/98
/*
            multiple LO granules.
/*
        Removed older change commentary.
/*
                                                            10/23/98
      -- Added COMPOUND_PGE parameter for handling
/*
             PGEs with multiple executables. Also deleted
/*
               old change history.
/*
      -- Updated description for ALTERNATE INPUT TIMER
                                                            11/07/98
/*
             to say that it has not affect for Dynamic
/*
                                                                  * /
               Internal ESDTs.
/*
      -- Added ALIGN_DPR_TIME_WITH_INPUT_TIME parameter
                                                            12/20/98
                                                                        * /
/*
      -- Increased the number of Profile Ids from 99 to
                                                            07/12/99
/*
               999.
/*
          Removed restriction on ALTERNATE_INPUT_TIMER with respect
/*
               to Internal Dynamic ESDTs.
           Added PGE_DEFAULT_PROFILE parameter.
                                                                  * /
/*
          Added PROFILE_SELECTOR_PGE_PARAMETER.
                                                                  * /
        -- Added Closest Granule values:
                                                              08/19/99
          CLOSEST_QUERY_OFFSET, CLOSEST_QUERY_RETRIES, and
          CLOSEST QUERY DIRECTION.
       -- Added "Metadata" to the query type.
                                                            12/13/99 */
        -- Updated Toolkit logical Ids that SSIT allows
                                                                  02/03/00
/*
          in ODL.
/*
          Removed old change history
                                                                        * /
/***********************
/*******************************
/*
/*
              -- Must be a string, max len 10 characters
               -- PGE name inside ODL file must be identical to
                     PGE name used as part of ODL filename
          Example
```

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```
PGE_NAME = "ssit"
PGE NAME = ""
/******************************
      PGE version
/*
       -- Must be a string, max len 5 characters
/*
        -- PGE version inside ODL file must be identical to
/*
           PGE version used as part of ODL filename
/
/*
·
     Example
     PGE VERSION = "1.0"
PGE VERSION = ""
/*
     PGE Profile ID
/*
       -- Must be an integer
/*
       -- Must be >= 0 and <= 999
/
/*
     Example
     PROFILE ID = 99
PROFILE_ID =
/*
      PGE Profile Description
/*
     -- Must be a string, max length 255 characters
/* Example */
/* PROFILE_DESCRIPTION = "Improved performance numbers"
PROFILE DESCRIPTION = ""
/******************************
      PGE On-Demand Profile Default
/*
       -- Must be a string, set to "Y" or "N".
/*
        -- If NOT Present, defaults to "N".
/*
       -- Marks a particular for this PGE (PGE Name +
/*
         PGE version) as the default for On Demand Processing */
/*
         Requests.
/*
        -- If more than 1 PGE (PGE Name + PGE Version) has this */
/*
        value set, an error will be returned.
/*
     Example
      PGE DEFAULT PROFILE = "N"
PGE_DEFAULT_PROFILE = ""
/******************************
/*
                                     * /
      Spacecraft platform name
/*
      -- Must be a string, max len 25 characters
/* Example
/* PLATFORM = "TRMM"
PLATFORM = ""
```

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```
/*
       Instrument name
/*
      -- Must be a string, max len 20 characters
/*
       Example
                                             * /
       INSTRUMENT = "CERES"
INSTRUMENT = ""
/******************************
       Minimum Number of Outputs
/*
       (used for QA purposes)
  -- Must be a integer, maxium 3 digits.
/*
/
/*
       Example
       MINIMUM OUTPUTS = 0
MINIMUM_OUTPUTS =
Type of PGE Scheduling
/*
           -- Must be a string with one of the following values: */
/*
             "Time" = TimeScheduled (PGE is scheduled based on the */
/*
                   boundary/period and the arrival of data). */
/*
             "Data" = DataScheduled (PGE is scheduled based on the */
/*
                   avialability of data produced by other */
/*
/*
             "Tile" = TileScheduled (PGE is scheduled based on the */
/*
                    the definition of Tiles). Note that
/*
                    TILE_SCHEME_NAME must have a value for Tile
/*
                    Scheduled PGEs.
/*
             "Orbit" = OrbitScheduled (PGE is scheduled based
/*
                    the orbit of the spacecraft. Note that then */
/*
                PROCESSING PERIOD must = "ORBITS=1" and */
/*
                     PROCESSING BOUNDARY must =
/*
                     "START_OF_ORBIT". Also, A file of named
/*
                  ORBIT_<platform>.odl must be present. */
/*
                Also if you want a Pathmap it needs to be
/*
                specified under PATHMAP_NAME. */
/*
             "Snapshot" = SnapshotScheduled (PGE is scheduled
/*
                   based on a single date/time entered */
/*
                   entered when the production request is */
/*
                   submitted.
/*
        Example
        SCHEDULE TYPE = "Tile"
SCHEDULE TYPE = ""
/*****************************
/*
       Nominal time interval between start of PGE runs */
/*
          -- NOT needed for PGEs where SCHEDULE_TYPE = "Snapshot" */
/*
          or SCHEDULE_TYPE = "Data".
/*
           -- Must contain a single P=V string, where
/*
            P is one of { YEARS, MONTHS, THIRDS WEEKS, DAYS,
                                                       * /
/*
                        HOURS, MINS, SECS, ORBITS}
/*
           -- NOTE that ORBITS must be used for PGEs based on an */
          Orbit Model. Note that PROCESSING BOUNDARY must be */
          set to "START OF ORBIT".
```

```
Example
        PROCESSING PERIOD = "DAYS=1"
/******************************
PROCESSING_PERIOD = ""
Nominal time boundary on which PGE processing begins */
/*
           -- NOT needed for PGEs where SCHEDULE TYPE = "Snapshot"
/*
           or SCHEDULE TYPE = "Data".
/*
           -- Must contain a one of
              { START_OF_MINUTE, START_OF_HOUR, START_OF_6HOUR,
               START_OF_DAY, START_OF_WEEK,
/*
               START_OF_ONE_THIRD_MONTH,
/*
               START_OF_MONTH, START_OF_YEAR, START_DATE,
/*
               START_OF_ORBIT };
/*
              also, "+<n>" or "-<n>"may be added to any of these,
              where <n> specifies integer seconds.
              For START_DATE an "=" can be added followed by the
/*
              start date.
/*
           -- NOTE that START_OF_ORBIT must be used for PGEs based
/*
             on an Orbit Model. A file of named
/*
             ORBIT_<platform>.odl must be present.
                                                         * /
/*
        Example
        PROCESSING_BOUNDARY = "START_OF_HOUR"
PROCESSING_BOUNDARY = ""
/******************************
        Software version
/*
           -- Must be a string, max 5 len characters
/*
            -- If Ssw version is not the same as PGE version, */
/*
                SswId ("<PGE Name>#<Ssw Version>") must already
/*
                be defined in the database;
/*
                That is, the only allowed values of the
                                                         * /
/*
                software version are either this PGE version */
/*
                or a previous PGE version for this PGE name */
/*
        Example
         PGE_SSW_VERSION = "1.0"
PGE_SSW_VERSION = ""
/*
       Delay for query
/*
          -- Optional for types of PGEs.
/*
          -- The amount of time (in SECONDS) that the query for
           input data should be delayed. This value is added */
          onto the Stop Time of any DPR generated with this
                                                    * /
          -- Used for Tiling or Metadata Query inputs.
         -- OPTIONAL Parameter. If not specified it is set to 0.
/*
          -- Must be an integer value >= 0.
/*
        Example
/*
                                                * /
           QUERY DELAY = 360 (1 hour)
```

```
QUERY_DELAY = 0
/*
       Name of the Tiling Scheme used
/*
         -- Must be a string of at most 20 characters.
/*
         -- There can be NO spaces in the string.
/*
          -- A file that defines the Tiling Scheme must
/*
          be created with the name TILE <tiling scheme>.odl
/*
/*
          TILE SCHEME NAME = "Earth Squared"
/*
/* NOTE that this is only needed for PGEs of Schedule Type = "Tile".
/* It can be deleted for all other types of PGEs.
TILE_SCHEME_NAME = ""
/*
       Name of Pathmap used
/*
        -- Must be a string of at most 25 characters.
/*
         -- There can be NO spaces in the string.
          -- A file that defines the Pathmap must */
/*
/*
          be created with the name PATHMAP_<Pathmap_Name>.odl
/*
       Example
/*
          PATHMAP_NAME = "Some_Name"
/* NOTE that this is only needed for PGEs of Schedule Type = "Orbit".
/* It can be deleted for all other types of PGEs.
PATHMAP NAME = ""
/* OPTIONAL PARAMETER
/*
       Check For Outputs
/*
          -- Must be a character value of either "Y" (YES) */
/*
           or "N" (NO).
         -- Defaults to "N" if not specified.
         -- When set to "Y", this means that a DPR of the PGE */
         will ONLY be scheduled if the output of that PGE has
/*
         NOT been produced. This is currently planned for use
/*
         in ASTER Routine Processing.
/*
         -- Note that creating a DPR (in the Production Request
/*
         Editor) with Reprocessing set will override this
/*
         flag.
/*
       Example
         CHECK FOR OUTPUTS = "N"
CHECK_FOR_OUTPUTS = "N"
/* OPTIONAL PARAMETER
/*
      Compound Pge Flag
                                           * /
/*
          -- Must be a character value of either "Y" (YES)
/*
         or "N" (NO).
/*
         -- Defaults to "N" (Not Compound PGE) if not specified.
         -- When set to "Y", this means that this PGE is made up
         of multiple executables AND that the output of one
```

```
of these executables is the input of another
         executable within the PGE.
        -- Note that setting this flag will hurt the performance
        of the Destaging step during PGE execution. It is
         best to only set it to "Y" if both conditions
         mentioned above are true.
       Example
       COMPOUND PGE = "N"
COMPOUND PGE = "N"
/******************************
/* Exit message object
/* Defines a possible PGE exit code, and associates a message with it. */
/* This object is optional and can be deleted if no EXIT MESSAGEs are
/* Replicate the object as needed to define EXIT MESSAGEs for multiple
/* EXIT CODEs.
/* See "Establishing Science Software Exit Conditions for the
/* Production Environment" white paper (420-WP-006-002) for the */
/* definitions and of exit code values and their uses.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = EXIT MESSAGE
/******************************
    Class (object counter, used only to distinguish objects)
         -- Must be an integer
/*
          -- Must be unique in this file for this type of object */
/*
         -- Must be greater than 0.
/*
      Example
       CLASS = 1
CLASS= 1
Exit code for this PGE
/*
      -- Must be an integer
/*
         -- Must be 0 or between 200 and 239
/
/*
      Example
      EXIT\_CODE = 200
/*********************
  EXIT\_CODE = 0
/* Message corresponding to this exit code
                                             * /
/* -- Must be a string, max len 240 characters */
/* Example */
/* EXIT_MESSAGE = "PGE successfully completed" */
```

```
EXIT MESSAGE = ""
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END OBJECT = EXIT_MESSAGE
/******************************
/* Exit dependency object
/* Defines names, exit codes and conditions of PGEs on which this */
/* PGE depends.
/* This object is optional and can be deleted if no EXIT DEPENDANCY(s)
/* exist for this PGE.
/* Replicate this object as needed to define multiple EXIT
/* DEPENDANCies for the PGE.
                                                  * /
/* See "Establishing Science Software Exit Conditions for the
                                                  * /
/* Production Environment" white paper (420-WP-006-002) for the */
/* definitions and of exit code values and their uses.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = EXIT_DEPENDENCY
/******************************
/*
     Class (object counter, used only to distinguish objects)
/*
         -- Must be an integer
/*
          -- Must be unique in this file for this type of object */
/*
         -- Must be greater than 0.
/*
      Example
      CLASS = 1
CLASS= 1
Name of PGE upon which this PGE depends
          -- Must be a string, max len 10 characters
/*
/*
          -- SswId ("<PGE name>#<Ssw version>") must be different */
/*
           than this SswID (PGE cannot depend on itself) */
/*
          -- SswId must already exist in the database
      Example: This CERES PGE depends on the exit code of
/*
/*
             a MODIS PGE: execute the CERES PGE only if the
/*
             MODIS PGE had exit code = 0
         DEPENDENCY PGE NAME = "MODIS"
DEPENDENCY_PGE_NAME = ""
Version of Ssw upon which this Ssw depends
/*
/*
         -- Must be a string, max len 5 characters */
/*
          -- SswId ("<PGE name>#<Ssw version>") must be different */
```

```
/*
            than this SswID (PGE cannot depend on itself) */
/*
       Example
       DEPENDENCY_SSW_VERSION = "x"
DEPENDENCY SSW VERSION = ""
/*****************************
       Operator for exit code dependency condition
/*
       -- Must be one of { >, <, >=, <=, =, != }
/*
       Example
       EXIT_OPERATION = "="
EXIT_OPERATION = ""
/*
      Exit code for PGE upon which this PGE depends
/*
          -- Must be an integer
/*
          -- Must be 0 or between 200 and 239
/*
          -- Must already exist in the database as a valid */
/*
          exit code for the PGE upon which this PGE depends
/*
       Example
       EXIT\_CODE = 0
/****************************
  EXIT\_CODE = 0
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END OBJECT = EXIT DEPENDENCY
/******************************
/* PCF entry object
/* The program DpAtCreateOdlTemplate (run at SSIT) generates one of
/* these object for each file entry in the PCF. Only generic Toolkit */
/* Logical IDs are ignored during Template Creation.
/* The operator needs to fill in values for the parameters as described */
/* in the comments for each parameter. Note that some parameters */
/* must be filled for each PCF entry, while others are optional or only */
/* needed based on the values of other parameters.
/*
/* THE FOLLOWING LINE MUST NOT BE MODIFIED
OBJECT = PCF_ENTRY
/******************************
/*
        Class (object counter, used only to distinguish objects)
/*
          -- This line is generated by DpAtCreateOdlTemplate */
/*
           from the PCF and is normally not modified
/*
          -- Must be an integer
          -- Must be unique in this file for this type of object
/*
          -- Must be greater than 0.
      Example
                                          * /
```

```
CLASS = 1
CLASS = 1
PCF logical ID
/*
           -- This line is generated by DpAtCreateOdlTemplate */
/*
             from the PCF and is normally not modified.
/*
           -- Must be a positive integer.
           -- Most values between 10000 and 10999 (Toolkit specific */
              Logical IDs) are ignored except for the following:
              Data Dictionary Logical ID (10251)
              Attitude Data Logical ID (10501)
              Ephmerous Data Logical ID (10502)
              Math Constant Logical ID (10999)
/*
                  Index Data File Logical ID (10900)
                  DEM Logical Ids (10649 - 10655)
              Ascii Dump Logical ID (10255)
/*
                  Disable Status Level RTI Logical ID (10117)
/*
              Disable Seed RTI Logical ID (10118) */
/*
                  Disable Status code RIT Logical ID (10119)
/*
        Example
        LOGICAL_ID = 100
LOGICAL_ID = 100
/*
       PCF file type
/*
           -- This line is generated by DpAtCreateOdlTemplate */
/*
             from the PCF and is normally not modified */
/*
           -- Must be an integer between 1 and 8 inclusive
            =1, PRODUCT INPUT FILES
            =2, PRODUCT OUTPUT FILES
            =3, SUPPORT INPUT FILES
            =4, SUPPORT OUTPUT FILES
            =5, USER DEFINED RUNTIME PARAMETERS
/*
             =6, INTERIM/INTERMEDIATE INPUT FILES
/*
             =7, INTERIM/INTERMEDIATE OUTPUT FILES
/*
            =8, TEMPORARY I/O
/*
       Example
        PCF FILE TYPE = 1
  PCF FILE TYPE = 1
Data Type Name -- same as Data Server ESDT Short Name */
           -- Must be a string, max len 8 characters */
           -- Required for all PCF ENTRY objects, except those with */
             PCF_FILE_TYPE = 5 or 8
            -- An ESDT ODL file for this name must exist in
             in directory $DPAT_ESDT_SCIENCE_MD, and have a name
              "ESDT_<Data Type Name#Data Type Version>.odl" */
            -- An ESDT of this Short Name must already be defined
            at the Data Server
        Example
```

```
DATA_TYPE_NAME = "TRWpl182"
        implies file $DPAT_ESDT_SCIENCE_MD/ESDT_TRWpcal182.odl */
        already exists in the SSIT environment, and that
/*
        ESDT Short Name "TRWpl182" already exists in the
        Data Server
DATA TYPE NAME = ""
Data Type Version
           -- Must be a string, max len 5 characters
            -- Required for all PCF ENTRY objects, except those with */
             PCF_FILE_TYPE = 5 or 8
            -- An ESDT ODL file for this name must exist in
             in directory $DPAT_ESDT_SCIENCE_MD, and have a name
              of the form
              "ESDT_<Data Type Name#Data Type Version>.odl" */
            -- An ESDT of this Short Name and Version must already
              be defined at the Data Server
/*
        Example
         DATA TYPE VERSION = "3.5.1"
DATA_TYPE_VERSION = ""
/*
        Minimum number of input granules for this logical ID
/*
            -- This line is generated by DpAtCreateOdlTemplate */
/*
             from the PCF and is only modified if the PGE can
/*
          execute successfully with fewer granules than in the
          PCF from which the template was generated.
          -- Used to support "Minimum Number of Granules"
                                                          * /
          Production Rule.
           -- Required for all PCF ENTRY objects
/*
             PCF_FILE_TYPE = 1, 3, 6 (ignored otherwise).
           -- Must be a >= 0.
         -- Note that for number of files within a granule
/*
          greater than one, the FILE TYPE object for this entry
/*
           must be changed to specify the various file types and
/*
           maximum number of files.
/*
        Example
        MIN GRANULES REQUIRED = 1
MIN GRANULES REQUIRED = 1
/******************************
        Maximum number of input granules for this logical ID
           -- This line is generated by DpAtCreateOdlTemplate */
             from the PCF and is only modified if the PGE can
           execute successfully with more granules than in the */
           PCF from which the template was generated.
          -- Used to support "Minimum Number of Granules"
          Production Rule.
           -- Required for all PCF ENTRY objects
                                                            * /
             PCF_FILE_TYPE = 1, 3, 6 (ignored otherwise)
           -- Must be a positive integer
          -- Note that for number of files within a granule
```

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```
greater than one, the FILE TYPE object for this entry */
must be changed to specify the various file types and */
/*
/*
          maximum number of files.
/*
         Example
         MAX_GRANULES_REQUIRED = 1
  MAX GRANULES REQUIRED = 1
/******************************
         Begin Period Offset.
           -- Only needed if data for this PCF entry is to be
/*
              selected BEFORE (-) or AFTER (+) the period defined
/*
              for the ESDT (stated in the corresponding ESDT
              ODL file).
            -- Defaulted to 0.
/*
            -- If set, must be an integer number of seconds.
/*
              A positive value indicates that the value is BEFORE
/*
              the Period of the ESDT. A Negative value is added to */
/*
              the Period so that the data will be found after the */
/*
              start of the period specified for the ESDT.
/*
        Example
         BEGIN PERIOD OFFSET = "7200" (2 hours)
  BEGIN_PERIOD_OFFSET = 0
End Period Offset.
/*
            -- Only needed if data for this PCF entry is to be
/*
              selected BEFORE (-) or AFTER (+) the period defined
/*
              for the ESDT (stated in the corresponding ESDT
              ODL file).
            -- Defaulted to 0.
            -- If set, must be an integer number of seconds.
/*
               A positive value indicates that the value is AFTER
/*
               the Period of the ESDT. A Negative value is
/*
               subtracted fromt he end of the period to find data */
/*
               starting within the period specified for the ESDT.
/*
        Example
         END PERIOD OFFSET = "-7200" (2 hours)
END PERIOD OFFSET = 0
Input file group ID
/*
            -- Required for all PCF ENTRY objects with
             PCF_FILE_TYPE =1, 3, 6 (ignored otherwise).
           -- Only used when input is defined as Static in ESDT
            -- Must be a string
/*
            -- 1st character must be one of {C,L,D,O}
/*
                C -- Coefficient file
/*
                L -- Lookup file
/*
                D -- Database file
/*
                O -- Other Type file
            -- Rest of string must resolve to a
                                                        * /
              positive integer < 10000
```

```
Example
        SCIENCE GROUP = "C1"
  SCIENCE GROUP = ""
Type of Input
/*
           -- Required for all PCF ENTRY objects with
            PCF_FILE_TYPE = 1,3,6 (ignored otherwise) */
/*
/*
           -- Must be a string with one of the following values:
             "Required" = Required input/no alternates
             "Primary" = Primary input/alternates defined
                       Alternate_Input object defined for this */
                       PCF Entry.
             "Optional" = Optional input, PGE can run without it. */
/*
                       An Optional_Input object must be defined */
                       for this PCF Entry.
/*
             "Alternate" = Alternate input/there will be an
/*
                       Alternate_Input object defined for this */
/*
                        PCF Entry.
/*
        Example
         INPUT TYPE = "Required"
  INPUT_TYPE = ""
Align DPR Time with Input
/*
        -- Specifies that the time of the DPR will be shifted
/*
           to match the real time of input for this Logical Id. */
        -- May only be set for one input per PGE Profile. */
        -- Valid values are "Y" or "N".
        -- If not specified, it is set to "N".
/*
        Example
        ALIGN DPR TIME WITH INPUT TIME = "Y"
ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
/*
       Number of Alternate Inputs needed.
          -- Required for all PCF ENTRY objects with
           PCF_FILE_TYPE = 1,3,6  that have
          INPUT TYPE = "Primary" (ignored otherwise)
/*
          -- Must be either 0 or 1.
/*
       Example
/*
         NUMBER NEEDED = 1
/*
         (This means that only 1 of the alternate inputs is
         required to execute the PGE)
  NUMBER_NEEDED =
Distinct Value for the input.
          -- Optional entry for PCF ENTRY objects with */
           PCF_FILE_TYPE = 1,3,6. Set to null if not provided. */
           -- A string value, max length 80 characters. */
```

```
-- A value that will allow unqiue naming of granules
          input by a PGE.
          -- Must be the name of a metadata parameter defined in
          a METADATA_DEFINITION objected. If a parameter is */
          is specified for which no METADATA_DEFINITION object
           exists an error will be raised during ODL parsing. */
          -- Supports what are called Multi-Granule ESDTs. These
              are ESDTs that have multiple granules for the same
           time period where the only difference between the
           granules is metadata parameters.
/*
         Example
          DISTINCT_VALUE = "CAMERA_DF"
DISTINCT_VALUE = ""
Query Type for the input.
            -- Optional entry for PCF ENTRY objects with
/*
             PCF FILE TYPE = 1,3,6.
            -- Must be one of
/*
                                                      * /
           "Temporal" -- Data is retrieved by time.
           "Spatial" -- Data is retrieved by spatial location */
                    of 'key' data type.
           "Tile"
                    -- Data is retrieved by spatial location */
                   of the tile.
/*
           "Already Created Tile"
.
/*
                   -- Data is retrieved by query of tiles
/*
                      already produced (used for cases when */
/*
                   one PGE needs the tile output of one or
                   more other PGEs).
/*
           "Metadata" -- Data is retrieved via temporal query and*/
//
                         a metadata query
          -- NOTE that if "Already Created Tile" is used, then
/*
              a Metadata Query is expected to query on the TileId
/*
           parameter in the metadata. "Already Created Tile" */
/*
           will NOT work without a metadata parameter that holds
/*
           the TileId.
/*
          -- The default is "Temporal" (if not specified).
/*
         Example
          OUERY TYPE = "Temporal"
QUERY_TYPE = ""
Spatial Time Delta.
/*
           -- Required for PCF ENTRY objects with
             PCF_FILE_TYPE = 1,3,6 that have QUERY_TYPE =
           "Spatial".
           -- An Integer that allows for some time differential
           when querying for input data on spatial constraints.
           It is added to the Start/Stop times of the DPR.
         -- Time is specified in seconds
        Example
         SPATIAL_TIME_DELTA = 100
```

SPATIAL_TIME_DELTA =

```
/*
        Spatial Pad
/*
           -- Required for PCF ENTRY objects with
             PCF_FILE_TYPE = 1,3,6 that have QUERY_TYPE =
              "Temporal".
            -- A real number (float) value equal to 0.0 or 1000.0.
             Or, a value between those endpoints. The units of
             measure is kilometers. INTEGERS are not valid!
/*
              (i.e. 10, 500)
/*
            -- This pad will be applied to the KEY INPUT granule
/*
        Example
        SPATIAL_PAD = 100.0
/*********************
  SPATIAL_PAD =
Key Input Data Type.
/*
        -- Optional for PCF ENTRY objects with
/*
          PCF_FILE_TYPE = 1,3,6 that have QUERY_TYPE = */
          "Temporal" (ignored otherwise). */
-- Specifies one of the following: */
/*
/*
            -- Spatial constaints of this input should be
             used when acquiring all data with QUERY_TYPE = */
/*
             "Spatial".
/*
             -- The number of granules for the input should
/*
             determine if a DataScheduled PGE should be
/*
/*
         -- Must be one of "Y" or "N".
/*
         -- "YES" should only be set for a single input with a
/*
          QUERY TYPE = "Temporal".
/*
          -- NOTE that the old version of this parameter
/*
          SPATIAL_KEY_INPUT is still supported and will be
        treated as having the same meaning.
/*
/*
        Example
        KEY INPUT = "Y"
/********************
  KEY_INPUT = ""
/* OPTIONAL PARAMETER
/*
       Query Offset for Closest Granule.
            -- Optional entry for PCF ENTRY objects with
/*
/*
             PCF_FILE_TYPE = 1,3,6. Set to 0 if not provided.
/*
            -- Must contain a single P=V string, where
             P is one of {WEEKS, DAYS, HOURS, MINS, SECS}.
/*
              Other valid period values are NOT supported for this */
              parameter.
            -- Used if input is expected to be the "Closest Granule".*/
              This means that the data under this PCF_ENTRY will be */
/*
              queried for every CLOSEST_QUERY_OFFSET from the */
/*
              Start Time of the Data Processing Request for the PGE,*/
/*
              either forward or backward as indicated by the value */
/*
              of CLOSEST QUERY DIRECTION.
/*
            -- Closest Granule supercedes Most Recent Granule
        Example
           CLOSEST QUERY OFFSET = "DAYS=1"
```

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```
CLOSEST_QUERY_OFFSET =
/*
      Closest Granule Direction.
            -- Required for PCF ENTRY objects with
             PCF_FILE_TYPE = 1,3,6 that have specified
/*
/*
              CLOSEST QUERY OFFSET.
/*
            -- A string that indicates the direction of a search
/*
             for a desired granule. Must be either:
              "Forward" or "Backward"
            -- CLOSEST_QUERY_DIRECTION determines the direction
/*
              of search (timewise) to query for a suitable granule */
/*
              from the Start Time of the Data Processing Request
/*
              for the PGE, either forward or backward.
/*
            -- Closest Granule supercedes Most Recent Granule
/*
        Examples
           CLOSEST_QUERY_DIRECTION = "Forward"
/*
           CLOSEST_QUERY_DIRECTION = "Backward"
CLOSEST QUERY DIRECTION =
/*
        Closest Granule Maximum Number of Retries.
/*
           -- Required for PCF ENTRY objects with
/*
             PCF_FILE_TYPE = 1,3,6 that have specified
/*
              CLOSEST_QUERY_OFFSET.
/*
            -- An Integer that allows a number of retries on the
/*
              inputs where the "Closest Granule" is expected.
/*
            -- The Query Offset set in the above parameter
/*
              (CLOSEST QUERY OFFSET) is used to repeat the
/*
              the query for the data for for time periods of
              Query Offset starting from the Start Time of the
/*
/*
              Data Processing Request for the PGE either forward or */
/*
              backward as indicated by the value
/*
              of CLOSEST_QUERY_DIRECTION.
/*
            -- Closest Granule supercedes Most Recent Granule
/*
                                                          * /
        Example
        CLOSEST OUERY RETRIES = 20
/**********************
  CLOSEST QUERY RETRIES =
/*****************************
/* File Types Object
/*
/* THIS OBJECT IS REQUIRED for PCF_FILE_TYPES = 1, 2, 3, 4, 5, 6. */
/* The default value for FILETYPE_NAME = "Single File Granule" is
/* usually all that is needed. This means that the input/output only */
/* has one file per granule. Note that this is separate from the */
/* MIN/MAX_GRANULES_REQUIRED and MIN/MAX_GRANULE_YIELD parameters which */
/* tell how many granules are desired for the PCF entry.
/*
/* If the Data Type defined under this PCF entry can have multiple
/* files per data granule then this entry must be updated and there has */
/* to be a corresponding entry in the ESDT ODL file for this Data Type. */
```

```
/* There needs to be one of these File Type objects for every File Type */
/* associated with this PCF entry. This object defines what file
/* type(s) this PGE wants to use for this PCF entry.
/* Note that for LO inputs, there should only be 1 File Type (different */
/* than "Single File Granule") that defines the number of files in a */
/* L0 granule.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
OBJECT = FILETYPE
/******************************
/*
       Class (object counter, used only to distinguish objects)
/*
       -- Must be an integer
-- Must be unique in this file
/*
/
/*
       Example
       CLASS = 1
CLASS = 1
Name of File Type.
/*
        -- Must be a string, max len 40 characters. Should
/*
         be meaningful in that the name indicates what sort of
/*
         data is stored within this file type. */
/*
          -- Defines what File Type is associated with this PCF */
/*
          entry. It will determine how many entries are */
       created under this logical ID in the PCF.
/*
/*
       Example
       FILETYPE_NAME = "Instrument Band 7"
FILETYPE NAME = "Single File Granule"
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END OBJECT = FILETYPE
/* AUXILIARY LOGICAL ID object
/*
/* Defines auxiliary logical Ids for a particular input.
/* This is used when there may be multiple granules for a particular
/* Logical Id and the PGE wants each granule under a separate logical
/* Id. The best example of this is the case where a specific L0 */
/* input could have multiple granules satisfying the given time period. */
/* Since only 1 LO granule is allowed per logical Id, Auxiliary Logical */
/* Ids can be used to spread the subsequent LO granules among many
/* Logical IDs.
/* When Auxiliary Logical Ids are specified, the first granule that
/* satisfies the input requirements (time period, metadata checks,
/* etc.) will be placed under the Logical Id defined under the
/* PCF ENTRY. Each subsequent granule will be placed under an
```

```
/* Auxiliary Logical Id. The granules are sorted by time, so the
/* earliest will go under the PCF_ENTRY Logical Id, with the
/* Auxiliary Logical Ids filled with later and later granules.
                                                   * /
/* There can be more than one AUXILIARY_LOGICAL_ID per PCF_ENTRY,
/* and if there is one AUXILIARY LOGICAL ID object, then there has to
/* the same number as specified for MAX GRANULES REQUIRED.
/* This object is optional for PCF ENTRY objects with
/* PCF FILE TYPE = 1, 3 or 6(ignored otherwise). If not needed, this
/* object should be deleted.
/*
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = AUXILIARY_LOGICAL_ID
/*
       Class (object counter, used only to distinguish objects)
/*
          -- Must be an integer
/*
          -- Must be unique in this file for this type of object
/*
          -- Must be greater than 0.
/*
       Example
       CLASS = 1
CLASS = 1
/*
      Auxiliary Logical Id
/*
         -- The Logical Id to place subsequent granules under
/*
        when creating the PCF.
/*
        -- Must be a positive integer.
/*
         -- The Ids specified for Toolkit use (10000 to 10999)
/*
         will not be allowed.
                                          * /
/*
       Example:
                                          * /
       AUX_LOGICAL_ID = 1001
/******************************
    AUX_LOGICAL_ID =
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END OBJECT = AUXILIARY LOGICAL ID
/* Alternate Input object
/* designated as an "alternate input." This is defined as an input
/* that can be substituted for another, already defined input.
/* Note that the "Primary" or first choice Alternate input is also
/* designated an Alternate input and thus should have one of these
                                                   * /
/* objects. Order should be set to 1. All subsequent Alternates
                                                   * /
/* should have the same Alternate Category as the primary and should
```

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```
/* have Order > 1.
                                          * /
/* This object is optional for PCF ENTRY objects with
/* PCF_FILE_TYPE = 1, 3 or 6(ignored otherwise). If not needed, this */
/* object should be deleted.
/* There can only be one of these objects per PCF ENTRY.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
OBJECT = ALTERNATE_INPUT
/*
        Class (object counter, used only to distinguish objects)
/*
         -- Must be an integer
/*
          -- Must be unique in this file for this type of object
                                                  * /
/*
         -- Must be greater than 0.
/
/*
       Example
       CLASS = 1
CLASS = 1
/*
       Name of Alternate Category
/*
         -- Must be a string, max len 20 characters
/*
         -- This is the grouping of Alternates for which this
         entry belongs. The ORDER paramater defines which */
/*
/*
         of the alternates is primary, secondary ...
/*
         -- There should be at least one other entry with the */
         category.
/*
/*
       Example:
/*
       CATEGORY = "SeaSurfTemp"
CATEGORY = ""
/*
      Default Order for this Alternate
/*
          Indicates the order of preference for alternates */
/*
         within the same category.
/*
          The primary (or first choice alternate) should have
/*
        ORDER = 1.
/*
          -- Must be an integer value.
          -- Should be no greater than the maximum number of
/*
/*
          alternates for the specified CATEGORY.
/*
       Example
       ORDER = 1 (this would be the primary alternate)
ORDER =
/******************************
/*
      Runtime Parameter Logical Id for this Alternate.
         Sets up a runtime parameter (defined in the User */
/*
/*
        Defined Runtime Parameters section of the PCF) that will */
         hold the logical ID of the chosen Alternate. */
          -- Must be a positive integer value.
```

```
/*
         -- Must NOT be a Toolkit specific logical ID
/*
           (10000 and 10999)
/*
         -- Must have a corresponding Runtime Parameter defined
/*
         in PCF section 5.
      Example
       RUNTIME PARM ID = 11111
RUNTIME PARM ID =
/*
      Default Timer value to wait for Alternate to be avaiable
/*
         -- Must contain a single P=V string, where */
/*
          P is one of { MONTHS, WEEKS, DAYS, HOURS, MINS, SECS} */
/*
         -- NOTE that this is not needed if WAITFOR (next
                                              * /
/*
         parameter) is set to "Y".
/*
      Example
/*
      TIMER = "DAYS=1"
TIMER = "PV_Time_Value_goes_here"
/*
      Wait For flag
/*
         Informs PDPS to wait for the alternate input (regardless */
/*
         of the timer value). This means that even if the timer */
/*
        expires, PDPS will wait for it before executing the */
/*
       the PGE.
/*
        -- A character value of either "Y" (YES) or "N" (NO).
/*
        -- Must be set the same for all Alternates in the
/*
       specified CATEGORY. If one Alternate in the CATEGORY
/*
        is set to "Y" then all WAITFOR flags for Alternates */
/*
       in that list also must have WAITFOR set to "Y".
/*
      Example
      WAITFOR = "N"
WAITFOR = ""
/*
      Temporal Flag
/*
      Indicates if the alternate should be the previous
/*
         incarnation of the Data Product (Y) rather than the
/*
        most current Product (N).
/*
        -- A character value of either "Y" (YES) or "N" (NO).
/*
      Example
      TEMPORAL = "N"
TEMPORAL = ""
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END OBJECT = ALTERNATE INPUT
/* Optional Input object
```

```
/* designated as an "optional input." This means that it is an input
/* that is desired (if available), but that the PGE can process data
/* successfully without it.
/* Note that Optional Inputs can work like Alternates, in that there
/* can be a selection to choose from and an order of preference.
/* In this case the first choice Optional input would be the "Primary" */
/* (ORDER = 1). If multiple Optional inputs are desired, it is best if */
/* they can be grouped as a list of "Primary" and its "Alternates".
/* This object is optional for PCF ENTRY objects with
/* PCF_FILE_TYPE = 1, 3 or 6 (ignored otherwise).
/* There can only be one of these objects per PCF ENTRY.
/* An input can either be Alternate or Optional, not both.
                                                        * /
/* If a PCF entry is not Optional, this object should be deleted. */
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = OPTIONAL INPUT
/*
        Class (object counter, used only to distinguish objects)
/*
           -- Must be an integer
/ *
           -- Must be unique in this file for this type of object */
/*
           -- Must be greater than 0.
/*
       Example
       CLASS = 1
CLASS = 1
* /
        Name of Optional Category
           -- Must be a string, max len 40 characters
           -- This is the grouping of optional inputs (one or more) */
           for which this entry belongs. The ORDER paramater
            defines which of the optionals is primary, */
              secondary ... for the case where there is more than */
         one optional input.
/*
        Example:
        CATEGORY = "SeaSurfTemp"
    CATEGORY = ""
/*
       Default Order for this Optional Input
/*
           Indicates the order of preference for optionals
          within the same category (when there is more than 1). */
           The primary (or first choice optional) should have */
         ORDER = 1.
          -- Must be an integer value.
           -- Should be no greater than the maximum number of
             optionals for the specified CATEGORY.
```

```
/*
    Example
     ORDER = 1 (this would be the primary optional input or */
/*
        for a single optional input) */
ORDER =
Runtime Parameter Logical Id for this Optional Input.
        Sets up a runtime parameter (defined in the User */
/*
       Defined Runtime Parameters section of the PCF) that will */
/*
        hold the logical ID of the chosen Optional input. */
/*
        -- Must be a positive integer value.
/*
        -- Must NOT be a Toolkit specific logical ID
/*
          (10000 and 10999)
/*
         -- Must have a corresponding Runtime Parameter defined
/*
        in PCF section 5.
/*
      Example
      RUNTIME_PARM_ID = 11111
RUNTIME PARM ID =
Default Timer value to wait for Alternate to be avaiable
/*
     -- Must contain a single P=V string, where */
/*
         P is one of { MONTHS, WEEKS, DAYS, HOURS, MINS, SECS} */
/*
         -- NOTE that this is not needed if WAITFOR (next */
/*
         parameter) is set to "Y".
/*
      Example
      TIMER = "DAYS=1"
TIMER = "PV_Time_Value_goes_here"
/*
      Temporal Flag
/*
     Indicates if the alternate should be the previous
/*
        incarnation of the Data Product (Y) rather than the
/*
        most current Product (N)
      -- A character value of either "Y" (YES) or "N" (NO).
/*
/*
      Example
                                    * /
      TEMPORAL = "N"
TEMPORAL = ""
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END_OBJECT = OPTIONAL_INPUT
/* Metadata checks object
/*
/* Defines parameter names, values and conditions for which this PGE */
/* should execute if true for this input file
/* PGE depends.
```

```
/* This object is optional for PCF ENTRY objects with
/* PCF_FILE_TYPE = 1,3 or 6 (ignored otherwise). Delete if not needed. */
/* Replicate object if multiple METADATA_CHECKS are required.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = METADATA_CHECKS
Class (object counter, used only to distinguish objects)
           -- This line is generated by DpAtCreateOdlTemplate */
/*
             from the PCF and is normally not modified
/*
           -- Must be an integer
/*
           -- Must be unique in this file for this type of object
           -- Must be greater than 0.
/*
/*
        Example
        CLASS = 1
CLASS = 1
Name of metadata parameter on which this PGE depends */
/*
           -- Must be a string, max len 40 characters.
/*
           -- Must be present in the ESDT ODL file for this ESDT.
/*
           -- Means that the specified metadata parameter must have */
             the specified value for the PGE to execute.
         -- For Product Specific Attibutes (PSAs), this is the
/*
          name of the attribute in question. The corresponding */
/*
           entry the ESDT_ODL file must specify CONTAINER_NAME =
/*
           "AdditionalAttributes".
/*
        Example:
/*
         The PGE depends on the metadata value for the parameter */
/*
         called "tbd_parm_name".
          PARM_NAME = "tbd_parm_name"
PARM_NAME = ""
Operator for dependency condition
/*
/*
           -- Must be one of { >, <, >=, <=, ==, != }
/*
          -- This means that the metadata parameter is:
/*
              ">" -- actual parameter value must be greater than
/*
                  value specified in VALUE.
/*
              "<" -- actual parameter value must be less than */
/*
                  value specified in VALUE.
/*
              ">=" -- actual parameter value must be greater than
/*
                    or equal to value specified in VALUE.
/*
              "<=" -- actual parameter value must be less than or
/*
                    equal to value specified in VALUE.
/*
              "==" -- actual parameter value must be equal to */
/*
                   value specified in VALUE.
/*
              "!=" -- actual parameter value must be NOT equal to
/*
                   value specified in VALUE.
        Example
          OPERATOR = "=="
                                               * /
```

```
OPERATOR = ""
/*
        Value for metadata parameter upon which this PGE depends
/*
           -- The value for the metadata parameter that is to be
/*
           checked against.
/*
             -- Computer data type (string, float or long) of the
/*
                value must correspond to the computer data type */
/*
                given in the ESDT ODL file
        Example
                                                     * /
            VALUE = 0
/*
        Requires that TYPE = "INT" for the "tbd_parm_name" object
/*
         in ODL file
/*
         $DPAT_ESDT_SCIENCE_MD/ESDT_<ESDTName#Version>.odl
/*
            VALUE = "Joe"
/*
         Requires that TYPE = "STR" for the "tbd_parm_name" object
/*
         in ODI, file
          SDPAT ESDT SCIENCE MD/ESDT <ESDTName#Version>.odl
VALUE = ""
/*
         Database query Value
                                                           * /
/*
                                                           * /
            -- OPTIONAL parameter. Defaults to "NONE".
/*
           -- Set to define this Metadata Query as having a
/*
           a VALUE set by PDPS based on the run of the PGE.
/*
            This Metadata Query will then be performed on the
/*
            value retrieved from the PDPS database rather than
/*
            the value specified in the VALUE parameter.
            -- Must be one of {"NONE", "PATH NUMBER", "ORBIT NUMBER", "TILE ID", "START DATA DAY",
/*
/*
            "END DATA DAY", "ORBIT IN DAY", "GRANULE IN ORBIT", "YEAR OF DATA", "MONTH OF DATA", "DAY OF DATA"}
/*
/*
/*
            "NONE" -- no dynamic value, use VALUE
/*
            "PATH NUMBER" -- get the orbital path number
/*
            "ORBIT NUMBER" -- get the number of the orbit
/*
            "TILE ID" -- get the id of the tile
/*
            "START DATA DAY" -- get the start data day
/*
                "END DATA DAY" \operatorname{\mathsf{--}} get the end data day
                                                           * /
/*
                "ORBIT IN DAY" -- get the orbit number within day
/*
            "GRANULE IN ORBIT" -- get the granule within the
/*
                           orbit assuming 6 minute
/*
            "YEAR OF DATA" -- the year of the data
/*
            "MONTH OF DATA" -- the month of the data
                                                           * /
/*
            "DAY OF DATA" -- the day of the data
                                                           * /
/*
         Example
            DATABASE_QUERY = "PATH NUMBER"
  DATABASE OUERY = "NONE"
Optional Parameter. Defaults to empty string if not specified.
/*
/*
         Name of metadata parameter which provides a key into a
/*
       a multi-containered object. Such an object is the
```

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```
/*
                                                                * /
       MeasuredParameters group in the inventory metadata.
/*
             -- Must be a string, max len 40 characters.
/*
             -- Must be present in the ESDT ODL file for this ESDT.
/*
             -- Is matched with KEY_PARAMETER_VALUE to determine
               the entry in a mult-containered metadata group. */
           -- For Product Specific Attibutes (PSAs), this entry
           should NOT be specified.
           -- Because of Metadata Query limitations, there can only
           be one KEY PARAMETER NAME/KEY PARAMETER VALUE pair */
            per PGE ODL File. This is because only a single
/*
           Metadata Query is allowed against the
           MeasuredParameters group.
           -- For Metadata Queries within the MeasuredParameters
/*
            group this should be set to the metadata field called
/*
            "ParameterName".
/*
         Example:
            KEY PARAMETER NAME = "ParameterName"
     KEY PARAMETER NAME = ""
Optional Parameter. Must be preset if KEY_PARAMETER_NAME exists.
   Defaults to the empty string if not specified.
/*
/*
         Value of metadata parameter which provides a key into a
/*
       a multi-containered object. Such an object is the
/*
       MeasuredParameters group in the inventory metadata.
/*
             -- Must be a string, max len 80 characters.
/*
             -- Must be present in the ESDT ODL file for this ESDT.
                                                                * /
/*
             -- Is matched with KEY_PARAMETER_NAME to determine
               the entry in a mult-containered metadata group. */
           -- For Product Specific Attibutes (PSAs), this entry
           should NOT be specified.
/*
           -- Because of Metadata Query limitations, there can only
/*
           be one KEY_PARAMETER_NAME/KEY_PARAMETER_VALUE pair */
/*
           per PGE ODL File. This is because only a single
                                                          * /
           Metadata Query is allowed against the
           MeasuredParameters group.
           -- For Metadata Queries within the MeasuredParameters
/*
           group this should be set to the desired value of the
/*
            metadata field called "ParameterName".
/*
         Example:
          KEY_PARAMETER_VALUE = "LandCoverage"
/*
KEY_PARAMETER_VALUE = ""
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
  END_OBJECT = METADATA_CHECKS
/******************************
/* Metadata Query Object
/* Defines parameter names, values and conditions for which this Input */
/* for the PGE should be selected. Only data that matches the
```

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```
/* with the specified metadata parameter with the specified value and
/* condition will be chosen as input to this PGE. Note that if no
/* matching data if found the PGE will NOT execute.
/* This object is optional for PCF ENTRY objects with
/* PCF_FILE_TYPE = 1,3 or 6 (ignored otherwise). Delete if not needed. */
/* Replicate object if multiple METADATA_QUERYs are required.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = METADATA_QUERY
/*
        Class (object counter, used only to distinguish objects)
/*
          -- This line is generated by DpAtCreateOdlTemplate */
/*
           from the PCF and is normally not modified
/*
          -- Must be an integer
          -- Must be unique in this file for this type of object
/*
/*
          -- Must be greater than 0.
/*
       Example
/*
       CLASS = 1
CLASS = 1
/*
       Name of metadata parameter on which this PGE depends
/*
          -- Must be a string, max len 40 characters
/*
          -- Must be present in the ESDT ODL file for this ESDT
/*
       Example:
/*
       This CERES PGE depends on the Q/A value of
/*
              this ESDT "TRWpcal182": execute the CERES PGE only */
/*
              if ESDT "TRWpcal182" had Q/A parameter
/*
              "tbd_parm_name" = 0
/*
         PARM NAME = "tbd parm name"
PARM_NAME = "Parm_name_goes_here"
/*
       Operator for dependency condition
                                               * /
/*
      -- Must be one of { >, <, >=, <=, ==, != }
/*
       Example
       OPERATOR = "=="
OPERATOR = "Operator_goes_here"
/*
       Value for ESDT parameter upon which this PGE depends
/*
          -- Computer data type (string, float or long) of the
/*
            value must correspond to the computer data type */
            given in the ESDT ODL file
/*
/*
/*
                                           * /
         VALUE = 0
/*
       Requires that TYPE = "INT" for the "tbd_parm_name" object
/*
       in ODL file
       $DPAT ESDT SCIENCE MD/ESDT <ESDTName#Version>.odl
```

```
VALUE = "Joe"
/*
        Requires that TYPE = "STR" for the "tbd_parm_name" object */
         in ODL file
         $DPAT ESDT SCIENCE MD/ESDT <ESDTName#Version>.odl
VALUE = "Value goes here"
/*
         Database query Value
/*
            -- OPTIONAL parameter. Defaults to "NONE".
                                                          * /
           -- Set to define this Metadata Query as having a
           a VALUE set by PDPS based on the run of the PGE.
            This Metadata Query will then be performed on the
            value retrieved from the PDPS database rather than
            the value specified in the VALUE parameter.
            -- Must be one of {"NONE", "PATH NUMBER", "ORBIT NUMBER", "TILE ID", "START DATA DAY",
/*
/*
            "END DATA DAY", "ORBIT IN DAY", "GRANULE IN ORBIT", "YEAR OF DATA", "MONTH OF DATA", "DAY OF DATA"}
/*
/*
/*
            "NONE" -- no dynamic value, use VALUE
/*
            "PATH NUMBER" -- get the orbital path number
/*
            "ORBIT NUMBER" -- get the number of the orbit
            "TILE ID" -- get the id of the tile
            "START DATA DAY" -- get the start data day
               "END DATA DAY" -- get the end data day
               "ORBIT IN DAY" -- get the orbit number within day
/*
            "GRANULE IN ORBIT" -- get the granule within the
/*
                         orbit assuming 6 minute
/*
            "YEAR OF DATA" -- the year of the data
/*
            "MONTH OF DATA" -- the month of the data
/*
         Example
           DATABASE OUERY = "PATH NUMBER"
DATABASE QUERY = "NONE"
/******************************
   Optional Parameter. Defaults to empty string if not specified.
/*
/*
         Name of metadata parameter which provides a key into a
/*
       a multi-containered object. Such an object is the
/*
       MeasuredParameters group in the inventory metadata.
            -- Must be a string, max len 40 characters.
/*
             -- Must be present in the ESDT ODL file for this ESDT.
/*
/*
             -- Is matched with KEY PARAMETER VALUE to determine
              the entry in a mult-containered metadata group. */
          -- For Product Specific Attibutes (PSAs), this entry
           should NOT be specified.
                                                               * /
           -- For Metadata Checks within the MeasuredParameters
           group this should be set to the metadata field called
            "ParameterName".
/*
         Example:
          KEY_PARAMETER_NAME = "ParameterName"
     KEY PARAMETER NAME = ""
```

```
Optional Parameter. Must be preset if KEY_PARAMETER_NAME exists.
/*
   Defaults to the empty string if not specified.
/*
/*
        Value of metadata parameter which provides a key into a
                                                      * /
/*
      a multi-containered object. Such an object is the
      MeasuredParameters group in the inventory metadata.
/*
           -- Must be a string, max len 80 characters.
/*
/*
           -- Must be present in the ESDT ODL file for this ESDT.
                                                      * /
/*
           -- Is matched with KEY PARAMETER NAME to determine
/*
            the entry in a mult-containered metadata group. */
/*
         -- For Product Specific Attibutes (PSAs), this entry
                                                      * /
/*
         should NOT be specified.
/*
         -- For Metadata Checks within the MeasuredParameters
/*
          group this should be set to the desired value of the
/*
          metadata field called "ParameterName".
/*
        Example:
/*
         KEY_PARAMETER_VALUE = "LandCoverage"
KEY PARAMETER VALUE = ""
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END_OBJECT = METADATA_QUERY
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END OBJECT = PCF ENTRY
/* After this point, the comments only address unique parameters that  */
/* have not been explained above
/*
/* Note that the order of PCF entries in not really inportant. These
/* have been ordered the same as their order would be in the PGEs PCF. */
OBJECT = PCF_ENTRY
  CLASS = 2
  LOGICAL ID = 3000
  PCF FILE TYPE = 2
  DATA TYPE NAME = ""
/*
        Minimum number of output granules for this logical ID */
/*
           -- This line is generated by DpAtCreateOdlTemplate */
/*
             from the PCF and is only modified if the PGE may
/*
          successfully produce less granules than specified in
/*
          the PCF used to generate the template.
/*
           -- Required for all PCF ENTRY objects with
/*
                                                      * /
            PCF_FILE_TYPE = 2, 4, 7 (ignored otherwise).
          -- Must be a positive integer.
         -- Note that for number of files within a granule
```

```
greater than one, the FILE TYPE object for this entry
/*
            must be changed to specify the various file types and
            maximum number of files.
/*
         Example
          MIN GRANULE YIELD = 1
  MIN GRANULE YIELD = 1
Maximum number of output granules for this logical ID */
            -- This line is generated by DpAtCreateOdlTemplate */
              from the PCF and is only modified if the PGE may
            successfully produce more granules than specified in
            the PCF used to generate the template.
            -- Required for all PCF ENTRY objects with
              PCF\_FILE\_TYPE = 2, 4, 7 (ignored otherwise).
            -- Must be a positive integer.
           -- Note that for number of files within a granule
            greater than one, the FILE TYPE object for this entry
/*
            must be changed to specify the various file types and
/*
           maximum number of files.
/*
         Example
          MAX_GRANULE_YIELD = 1
  MAX_GRANULE_YIELD = 1
/*
                                                               * /
         Associated MCF ID
/*
             -- The Logical ID of the MCF associated with this input. */
/*
              Informs Data Processing as to the logical id which
/*
               the PGE associates the MCF for this output.
             -- Required for all PCF ENTRY objects with
              PCF FILE TYPE = 2, 4 (if not output by the Toolkit),
               7. (ignored otherwise).
             -- Must be a positive integer.
             -- NOTE that any input PCF entries that were created
               by CreateOdlTemplate for MCFs should be deleted. The */
/*
               information about which Logical IDs are for MCFs is
/*
               is captured by this parameter for each output that
/*
               the MCF is associated with.
/*
         Example
         ASSOCIATED MCF ID = 3001
  ASSOCIATED MCF ID =
/*
                                                         * /
        Output file group ID
            -- Required for all PCF ENTRY objects with
              PCF_FILE_TYPE = 2 (ignored otherwise)
             -- Must be a string
             -- 1st character must be one of {S,Q,H,B}
                S -- Science file
                 O -- Q/A file
/*
                 H -- Production history file
                                                         * /
                B -- Browse file
            -- Rest of string must resolve to a
```

```
/*
             positive integer < 1000
/*
        Example
/*
        SCIENCE_GROUP = "S1"
/*
        Files associated with this science file would have
        SCIENCE GROUP = "Q1", SCIENCE_GROUP = "B1", etc.
SCIENCE GROUP = " "
/*
        Nominal no. of file instances with *different* logical IDs, */
/*
        but which are associated with each other
/*
           -- Optional for all PCF ENTRY objects with
/*
            PCF_FILE_TYPE = 2 (ignored otherwise).
           -- If 0, ignore this parameter -- no other logical IDs
/*
           are associated with it.
/*
       Example
/*
                                             * /
        INSTANCE = 0
/*
       Note: This parameter is specifically designed to accomodate */
/*
       the CERES case where 24 standard product files are generated */
/*
       per day, each with a *different* logical ID, but are all
/*
       essentially an instance of a single file format
       In this case INSTANCE would take values 1, 2, ..., 24 */
INSTANCE = 0
/*
        Distinct Value for the output.
/*
          -- Optional entry for PCF ENTRY objects with */
/*
            PCF_FILE_TYPE = 2,4,7. Set to null if not provided.
          -- A string value, max length 80 characters. */
/*
/*
         -- A value that will allow unqiue naming of granules
/*
         produced by a PGE.
/*
          -- Must be the name of a metadata parameter defined in
/*
         a METADATA_DEFINITION objected. If a parameter is */
/*
         is specified for which no METADATA_DEFINITION object
/*
         exists an error will be raised during ODL parsing. */
/*
         -- Supports what are called Multi-Granule ESDTs. These
/*
           are ESDTs that have multiple granules for the same
/*
          time period where the only difference between the
/*
          granules is metadata parameters.
/*
        Example
        DISTINCT VALUE = "CAMERA DF"
DISTINCT VALUE = ""
Minimum expected size (in MB) of this output
           (used for QA purposes).
/*
           -- Required for all PCF ENTRY objects with
/*
            PCF_FILE_TYPE = 2 (ignored otherwise)
          -- Must be a positive integer
                                                  * /
/*
       Example
        MINIMUM SIZE = 120000
```

 $MINIMUM_SIZE = 0$

```
/*
        Maximum expected size (in MB) of this output
/*
          (used for QA purposes).
/*
           -- Required for all PCF ENTRY objects with
/*
                                                      * /
            PCF_FILE_TYPE = 2 (ignored otherwise)
/*
           -- Must be a positive integer
          -- Must be larger than or equal to MINIMUM_SIZE
/*
       Example
        MAXIMUM SIZE = 5000000
MAXIMUM_SIZE = 1
  OBJECT = FILETYPE
    CLASS = 1
    FILETYPE_NAME = "Single File Granule"
  END OBJECT = FILETYPE
/* Associated Science Data Object
/*
/* THIS OBJECT IS REQUIRED for Outputs where the SCIENCE_GROUP
/* contains 'B' or 'Q' (meaning it is a BROWSE or QA granule). It is
/* ignored otherwise.
/*
/* BROWSE and QA output granules are linked to the science granules
/* for which they are produced. This linkage occrus when the produced
/* BROWSE or QA granules are inserted to the Data Server. This object
/* defines the linkage so that the correct link can be made after */
/* the PGE completes and its outputs are inserted to the Data Server.
/*
/* If more than one science granule is associated with the BROWSE or
                                                      * /
/* QA output defined by this PCF ENTRY, then repeat the Associated */
/* Science Data Objects to specify the various Logical Ids that define */
/* those Associated Science Granules.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = ASSOCIATED_SCIENCE_DATA
/******************************
/* Class (object counter, used only to distinguish objects) */
/*
          -- Must be an integer
/*
                                                  * /
          -- Must be unique in this file
/
/*
/*
       Example
       CLASS = 1
CLASS = 1
/*
       Associated Science Granule's Logical Id
                                                 * /
/*
          -- Must a positive integer value.
/*
          -- Defines which logical Id this BROWSE/QA granules is
/*
         Associated with. This means that when the associated
         science granule is inserted to the Data Server, a */
         will be made with the BROWSE/QA granule defined by */
```

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```
/*
       this PCF_ENTRY.
/*
       -- A check will be done to verify that the Logical ID
/*
        has been defined in the ODL file.
/*
      Example
      ASSOCIATED SCIENCE LOGICAL ID = 12345
ASSOCIATED SCIENCE LOGICAL ID =
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END_OBJECT = ASSOCIATED_SCIENCE_DATA
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
 CLASS = 3
 LOGICAL ID = 200
/* This is an example for in Support input.
 PCF_FILE_TYPE = 3
/* Support input and output types (if not associated with generic */
/* Toolkit files) have their own Data Types and Versions.
DATA TYPE NAME = ""
 DATA TYPE VERSION = ""
/* This is always 1 for non-product inputs
/******************************
 DATA_TYPE_REQUIREMENT = 1
/* Support inputs can be any input type. Though none are */
/* shown, they can have Alternate or Optional input objects as well
/* Metadata checks objects.
INPUT TYPE = ""
 NUMBER NEEDED = 1
 OBJECT = FILETYPE
   CLASS = 1
   FILETYPE_NAME = "Single File Granule"
 END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
 CLASS = 4
 LOGICAL ID = 4000
 PCF FILE TYPE = 5
```

```
/*
        Runtime parameter name
/*
           -- This line is generated by DpAtCreateOdlTemplate */
             from the PCF and is normally not modified
/*
            -- Required for all PCF ENTRY objects with
/*
/*
             PCF_FILE_TYPE = 5 (ignored otherwise)
                                                         * /
           -- Must be a string, max len 50 characters
/*
        Example
        PGE PARAMETER NAME = "Spacecraft Class"
PGE_PARAMETER_NAME = " "
/*
        Runtime parameter default value
/*
           -- This line is generated by DpAtCreateOdlTemplate */
             from the PCF and is normally not modified
/*
/*
            -- Required for all PCF ENTRY objects with
/*
             PCF_FILE_TYPE = 5 (ignored otherwise)
           -- Must be a string, max len 200 characters
          -- If double quotes must be included in the string
          (i.e. the string must read "This is the string")
           then single quotes must be placed around the string.
           Thus "This is the string" would become '"This is the
/*
           string"'. Note that this automatically done by
/*
          the CreateODLTemplate tool.
/*
        Example
        PGE PARAMETER DEFAULT = "TRMM"
PGE PARAMETER DEFAULT = " "
Runtime parameter Dynamic Value
/*
           -- This line is generated by DpAtCreateOdlTemplate */
/*
             from the PCF and is set to "NONE".
/*
          -- Set to define this runtime parameter as having a
          a value set by PDPS based on the run of the PGE.
/*
          This runtime parameter will then have the value of
/*
           the specified attribute when the PCF is created.
/*
           -- Required for all PCF ENTRY objects with
/*
             PCF_FILE_TYPE = 5 (ignored otherwise)
/*
           -- Must be one of {"NONE", "PATH NUMBER",
/*
           "ORBIT NUMBER", "TILE ID", "START DATA DAY",
/*
           "END DATA DAY" }
/*
           "NONE" -- no dynamic value, use Default
/*
           "PATH NUMBER" -- get the orbital path number
                                                    * /
           "ORBIT NUMBER" -- get the number of the orbit
           "TILE ID" -- get the id of the tile
/*
           "START DATA DAY" -- get the start data day
              "END DATA DAY" -- get the end data day
/*
        Example
          PGE_PARAMETER_DYNAMIC_VALUE = "PATH NUMBER"
  PGE PARAMETER DYNAMIC VALUE = "NONE"
```

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```
/*
        Profile Selector Runtime Parameter Flag
/*
           -- This line is generated by DpAtCreateOdlTemplate */
            from the PCF and is set to "N".
/*
         -- Must be a string, value of either "Y" (for Yes) and
          "N" (for No).
         -- If not specified, defaults to "N".
         -- Indicates that this Runtime Parameter (along with
                                                     * /
         others) uniquely identifies a profile of this PGE */
/*
             (PGE Name + PGE version) based on the PARAMETER_NAME
/*
          and DEFAULT VALUE pair.
/*
           -- If set to "Y" for any Runtime Parameter, then the
                                                     * /
/*
             RegisterPGE tool will check to make sure that this
/*
             Runtime Parameter/Default Value pairs flaged
/*
          assures that this PGE Profile is different from all */
/*
          the rest.
/*
        Example
          PROFILE_SELECTOR_PGE_PARAMETER = "N"
                                                 * /
PROFILE SELECTOR PGE PARAMETER = ""
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 5
  LOGICAL_ID = 200
/* This is an example for an Interim/Intermediate input.
PCF FILE TYPE = 6
/* Interim/Intermediate input and output types have their own Data
/* Types and Versions.
DATA_TYPE_NAME = ""
  DATA_TYPE_VERSION = ""
/*
       Last PGE to Use Interim Data Type?
/*
       This is a "Y" or "N" parameter that defines if this PGE
       (the one defined by this ODL file) is the last to use this
/*
/*
       Interim Data type.
/*
                                                     * /
          -- Must be a string or "Y" or "N".
/*
       Example
        INTERIM_LAST_PGE_TO_USE = "N"
  INTERIM_LAST_PGE_TO_USE = "N"
  DATA_TYPE_REQUIREMENT = 1
/* Interim/Intermediate inputs can be any input type. Though none are */
/* are shown, they can have Alternate or Optional input objects as well */
/* Metadata checks objects.
```

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```
/******************************
/*
/*
           TEMPLATE ESDT SCIENCE METADATA ODL FILE
/*
                                                     * /
/*
                                                     * /
/* The SSIT operator's responsibility is to copy this file over and
/* edit it to add all necessary PDPS metadata values.
/* Each ESDT used by a PGE must have a corresponding ESDT SCIENCE */
/* metadata ODL file.
/* All ESDT ODL files must reside in directory $DPAT ESDT SCIENCE MD .
                                                    * /
/* The operator must add a value to the right of the "=" for each
/* parameter.
                                                     * /
/* CHANGE LOG
/*
                                                    05/28/97 */
     -- Added File Type object.
                                                    06/04/97 */
/*
     -- Added Processing Level.
/*
     -- Added Orbit types to period/boundary comments. 06/07/97
/*
     -- Updated Archived_By and Processed_By to be
/*
       required for all types but Static.
                                                          06/24/97
/*
     -- Allowed for 0 value in Interim Short Delete.
                                                          10/07/97
/*
     -- Added DURATION parameter.
                                                          11/14/97
/*
     -- Removed OVERLAP as a choice for prediction meth. 11/03/97
/*
     -- Changed METADATA_CHECKS to METADATA_DEFINITION.
                                                          12/06/97
/*
       Updated description of FILETYPE object.
/*
     -- Added optional METADATA_CONTAINER parameter.
                                                          12/15/97
/*
     -- Added info on Metadata_Defintion for 02/04/98
                                                              * /
/*
              Product Specific Attibutes.
                                                                * /
/*
     -- Added The Distinct Parameter definition.
                                                          03/24/98
                                                                      * /
/*
     -- Fixed length for PROVIDER, FILETYPE_NAME.
                                                          03/31/98
/*
     -- Made CONTAINER no longer optional for METADATA
                                                          05/06/98
/*
            DEFINTION object.
/*
     -- Updated definition of USE_OBJECT.
                                                          06/25/98
/*
     -- Added KEY_PARAMATER_NAME and KEY_PARAMETER_VALUE
                                                          07/05/98
/*
            for Metadata Definition objects.
                                                                * /
/*
                                                                * /
            Updated description for DISTINCT_PARAMETER.
     -- Updated lengths for INSTRUMENT and PLATFORM.
                                                          08/13/98
```

```
/*
    -- Added "NONROUTINE" for PREDICTION_METHOD 08/24/98
/*
    parameter. This is for ASTER Routine Processing. */
/*
    -- Added PRODUCTION_CHAIN object 07/12/99 */
    -- Added ONDEMAND_DELETION_INTERVAL parameter
/*
/******************************
/*
        Data Type name
/*
          -- Must be a string, max len 8 characters
/*
           -- ESDT name inside ODL file must be identical to */
/*
               ESDT name used as part of ODL filename, which in turn was generated from the */
/*
/*
               DATA_TYPE_NAME in the PGE ODL file for the PCF
/*
/*
           -- It should be the same as the Short Name used in the */
/*
               ESDT defintion at the Data Server.
/*
       Example
       DATA_TYPE_NAME = "NMC"
DATA TYPE NAME = ""
/******************************
        Data Type Version
/*
          -- Must be a string, max len 5 characters
/*
           -- ESDT name inside ODL file must be identical to */
/*
               ESDT name used as part of ODL filename, which in turn was generated from the */
/*
/*
               DATA_TYPE_VERSION in the PGE ODL file for the PCF */
/*
/*
           -- It should be the same as the VersionID used in the
/*
             ESDT defintion at the Data Server.
/*
           -- Note that this is not important for Interim/
/*
           Intermediate types.
/*
        Example
        DATA_TYPE_VERSION = "3.5.1"
DATA_TYPE_VERSION = ""
/******************************
/*
       Science instrument name
/ *
        -- Must be a string, max 20 len characters
/* Example
/* INSTRUMENT = "NMC"
/******************************
INSTRUMENT = ""
/******************************
        Spacecraft platform name
/*
/* -- Must be a strin
/* Example
/* PLATFORM = "NOAA9"
        -- Must be a string, max len 25 characters
PLATFORM = ""
```

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```
/* ESDT description
/*
      -- Must be a string, max len 60 characters
/*
      Example
      DATA TYPE DESCRIPTION = "NMC 12-hour forecast"
DATA TYPE DESCRIPTION = ""
/****************************
/*
      ESDT data provider (DAAC name to which files are delivered) */
/*
      -- Must be a string, max len 50 characters
/*
      Example
      PROVIDER = "National Meteorological Center"
PROVIDER = ""
/*
   Nominal ESDT file size in MB
/*
        -- Must be a floating point number (i.e., include a ".") */
/ *
        -- Must be greater than 0.000001
/* Example
/* NOMINAL_SIZE = 1.5
/************************
NOMINAL_SIZE =
/*
      Processing Level
      -- A string defining the level of processing for this \ \ ^*/ ESDT. \ \ ^*/
/*
/
/*
     -- Must be a string of no more than 6 characters.
/*
/*
      Example
      PROCESSING LEVEL = "L0"
PROCESSING_LEVEL = ""
/*******************************
/*
       HDF Data Flag
/*
        Informs DPS that the data within this ESDT will be
/*
        HDF data (if set to Y). Needed for DPS to correctly
/*
        set the PCF entries for metadata access.
/*
        -- A character value of either "Y" (YES) or "N" (NO).
/*
       -- This will tell the Toolkit whether to get the */
/*
       metadata information from the HDF file of the ASCII
/*
       metadata file.
/*
      Example
      HDF DATA = "N"
HDF DATA = ""
/* THIS PARAMETER IS ONLY REQUIRED FOR files in the INPUT sections
/* of the PCF (PRODUCT, SUPPORT or INTERMEDIATE)
/* (ignored for output files, which are always type "I")
                                         * /
```

```
/*
                                                           * /
         Dynamic flag -- flags whether an ESDT is dynamic
/*
            -- Allowed values:
/*
                                                      * /
                 "S" -- Static file
                 "I" -- Dynamic internal file
/*
                                                      * /
                 "E" -- Dynamic external file
                 "T" -- Interim/Intermediate file
/*
        Example
          DYNAMIC FLAG = "E"
DYNAMIC FLAG = ""
/* THIS PARAMETER IS ONLY REQUIRED FOR Interim/Intermediate files */
/* (DYNAMIC_FLAG = "T")
/*
                                            * /
/*
        Long Duration of Interim/Intermediate files of the
/*
         ESDT before they are be deleted (because no longer needed).
/*
           -- Must be a positive number (0 is NOT allowed).
/*
          -- Time is specified in MINUTES.
/*
            -- This value should be long enough such that there is
                                                          * /
/*
             no chance that the file will be needed at the end of */
/*
              this duration.
/*
         Example
          INTERIM_LONG_DURATION = 7200 (5 days)
INTERIM_LONG_DURATION =
/*****************************
/* THIS PARAMETER IS ONLY REQUIRED FOR Interim/Intermediate files */
/* (DYNAMIC_FLAG = "T")
/*
/*
         Short Duration of Interim/Intermediate files of the
         ESDT before they are be deleted (because no longer needed).
/*
/*
            -- Must be greater than or equal to 0. It should only
            O if no other PGE uses this Interim file (i.e. an */
            Interim file that a PGE uses internally between
            Processes).
/*
          -- Time is specified in MINUTES.
/*
            -- This value is a guess at the soonest (after use and
/*
              any QA checks) at when the Interim File can be
/*
              deleted.
/*
        Example
          INTERIM SHORT DURATION = 1440 (24 Hours)
INTERIM_SHORT_DURATION =
/* THIS PARAMETER IS ONLY REQUIRED FOR Dynamic Internal files
/* (DYNAMIC_FLAG = "I")
/*
/*
         On Demand Deletion Interval. This is the time between
/*
        creation of a granule of this ESDT via an On Demand request
/*
        and when this granule is deleted (because it has been */
/*
        distributed to the requestor).
/*
         -- Must contain a single P=V string, where
              P is one of { YEARS, MONTHS, THIRDS, WEEKS, DAYS,
```

```
/*
                        HOURS, MINS, SECS, ORBITS}
           -- Must be greater than or equal to 1 week ("WEEKS=1").
           An error will be returned if the value specified */
           is less than 1 week.
          -- If not specified then the value defaults to 1 week
                                                      * /
           ("WEEKS=1").
        Example
         ONDEMAND DELETION DURATION = "WEEKS=1"
ONDEMAND DELETION DURATION = ""
/* THIS PARAMETER IS ONLY REQUIRED FOR Dynamic External files
/* (DYNAMIC_FLAG = "E")
/*
/*
        Data availability prediction method
/*
          -- Must be one of {"ROUTINE", "NONROUTINE}
/*
         -- "ROUTINE" = data is expected at regular intervals.
/*
             "NONROUTINE" = data comes in sparatically.
/*
                     No Period, Boundary or Duration is
                    required for NONROUTINE data.
/*
/*
        Example
          PREDICTION_METHOD = "ROUTINE"
PREDICTION_METHOD = ""
/* THIS PARAMETER IS ONLY REQUIRED FOR Dynamic External files
/* (DYNAMIC_FLAG = "E")
/*
/*
        Supplier name
         -- Must be a string, max len 30 characters
/*
/*
        Example
         SUPPLIER NAME = "NOAA"
SUPPLIER NAME = ""
/* THIS PARAMETER IS ONLY REQUIRED FOR Dynamic External files
/* (DYNAMIC_FLAG = "E")
/*
/*
        Nominal collection period within granule
/*
                                                      * /
         -- Must contain a single P=V string, where
/*
             P is one of { YEARS, MONTHS, THIRDS, WEEKS, DAYS,
/*
                       HOURS, MINS, SECS, ORBITS}
           -- NOTE that if ORBITS are used PROCESSING_BOUNDARY
           must be set to "START_OF_ORBIT".
/*
           -- This value is ignored for PREDICTION_METHOD = */
/*
          "NONROUTINE"
                                             * /
/*
        Example
          PERIOD = "HOURS=12"
PERIOD = ""
```

```
/* THIS PARAMETER IS ONLY REQUIRED FOR Dynamic External files
                                                           * /
/* (DYNAMIC_FLAG = "E")
/*
/*
         Nominal time boundary on which ESDT arrives
/*
          -- Must contain 1 or more P=V strings, where P is one of
               { START_OF_HOUR, START_OF_6HOUR, START_OF_DAY, */
/*
/*
                START_OF_WEEK, START_OF_ONE_THIRD_MONTH,
/*
                START OF MONTH, START OF YEAR, START DATE,
/*
                START OF ORBIT };
               also, "+<n>" or "-<n>"may be added to any of these,
/*
               where <n> specifies integer seconds.
              For START_DATE an "=" can be added followed by the
               start date.
           -- NOTE that START_OF_ORBIT must be used for Data based
              on an Orbit Model. A file of named
/*
              ORBIT_<platform>.odl must be present.
                                                           * /
/*
            -- This value is ignored for PREDICTION_METHOD = */
/*
                                                 * /
           "NONROUTINE"
/*
         Example
          BOUNDARY = "START OF DAY+10800"
BOUNDARY = ""
/* OPTIONAL PARAMETER
/* ONLY USED FOR Dynamic External files
/* (DYNAMIC_FLAG = "E")
/*
/*
         Duration of the data.
/*
        -- Defines the length of time covered by the data.
/*
        -- Only needed if length of time covered by the data
/*
            differs from the value specified in PERIOD.
/*
          -- Must contain a single P=V string, where
/*
              P is one of { YEARS, MONTHS, THIRDS, WEEKS, DAYS,
/*
                          HOURS, MINS, SECS, ORBITS}
/*
            -- NOTE that if ORBITS are used PROCESSING_BOUNDARY
/*
            must be set to "START_OF_ORBIT".
/*
            -- This value is ignored for PREDICTION_METHOD = */
/*
           "NONROUTINE"
                                                 * /
/*
         Example
          DURATION = "HOURS=12"
DURATION = ""
/* THIS PARAMETER IS ONLY REQUIRED FOR Dynamic External files
/* (DYNAMIC_FLAG = "E")
/*
                                            * /
/*
         Avg delay between granule collection and arrival, in secs
/*
         -- Must be a positive integer
/*
         Example
         DELAY = 43200
DELAY =
/*****************************
```

```
/*
        Spatial characteristics of the Data Type.
/*
           -- Must be a character, "Y" = Yes, spacial
             characteristics exist, "N" = No, spacial
/*
/*
             characteristics do not exist.
        Example
        SPATIAL_FLAG = "Y"
SPATIAL FLAG = ""
/* OPTIONAL parameter
/*
        Distinct Parameter for Granule naming
          -- A String, max length 80 characters.
/*
/*
         -- A value that will allow unquue naming of granules
/*
         produced by a PGE.
         -- Must be the name of a metadata parameter defined in
/*
         a METADATA_DEFINITION objected. If a parameter is */
/*
/*
         is specified for which no METADATA DEFINITION object
/*
         exists an error will be raised during ODL parsing. */
/*
         -- Supports what are called Multi-Granule ESDTs. These
/*
             are ESDTs that have multiple granules for the same
/*
         time period where the only difference between the
/*
          granules is metadata parameters.
         -- NOTE that this parameter must be unquie without */
/*
         including KEY_PARAMETER_NAME and KEY_PARAMETER_VALUE.
/*
          If the parameter requires it, then they must still be
/*
          specified, but the value specified for */
/*
          DISTINCT_PARAMETER cannot need them to be consided */
/*
          unique.
/*
        Example
        DISTINCT PARAMETER = "CAMERA"
DISTINCT PARAMETER = ""
/* Use object
/* Defines the DAAC(s) where the data is used.
                                                      * /
/* There should be one of these for every DAAC where the data type is
/* used. Delete or replicate this object as necessary.
/* This object is really only required for data that is used at a DAAC */
/* other than where it's produced.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = USE_OBJECT
/*
       Class (object counter, used only to distinguish objects)
/*
          -- Must be an integer
/*
                                                 * /
          -- Must be unique in this file
/
/*
       Example
       CLASS = 1
```

```
CLASS = 1
DAAC where the Data Type is used.
/*
         -- Must be a string, max len 4 characters. Use the
/*
         DAAC abberviation (i.e. GSFC)
/*
         -- There should be one of these for every DAAC where
/*
         the data type is used.
/*
      Example
       USED BY = "GSFC"
USED BY = ""
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END OBJECT = USE_OBJECT
/* THIS PARAMETER IS REQUIRED FOR ALL types of file but STATIC (S)
/* (DYNAMIC_FLAG = "S")
/*
/*
      DAAC where the Data Type is archived.
/*
         -- Must be a string, max len 4 characters.
/*
        DAAC abberviation (i.e. GSFC)
/*
      Example
      ARCHIVED AT = "GSFC"
ARCHIVED AT = ""
/* THIS PARAMETER IS ONLY REQUIRED FOR ALL types of file but STATIC (S) */
/* (DYNAMIC_FLAG = "S")
/*
/*
      DAAC where the Data Type is processed.
/*
         -- Must be a string, max len 4 characters. Use the
/*
         DAAC abberviation (i.e. GSFC)
/*
      Example
       PROCESSED_AT = "GSFC"
PROCESSED AT = ""
/* File Types Object
/*
/* THIS OBJECT IS REQUIRED FOR all ESDTs that can have multiple files
/* per data granule. It is NOT needed for ESDTs where each file */
/* represents a single granule (those inputs in the PGE ODL file that
/* have "Single File Granule" for the File Type).
/* It is up to the PGE writer to detemine if multiple files (whether
/* different types or multiple files for the same type) are
/* read/written by the PGE. Files and granules differ because a */
/* a granule is the smallest amount of data recognized by the system,
```

```
/* but one granule may be made up of several files. These files */
/* may be of different types, so that only specific information
/* (specific files) can be requested as input.
/* Defines the types of files and their maximum numbers that can be
/* associated with this ESDT.
/* There should be one of these for every File Type that can be
/* associated with this ESDT.
/* Note that this does NOT need to be added for LO data. Though */
/* such granules are multi-file, they are handled differently by */
/* PDPS. There does not need to be a FILETYPE object in the ESDT ODL
/* for L0 data.
/*
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = FILETYPE
/******************************
/*
    Class (object counter, used only to distinguish objects)
/*
         -- Must be an integer
/*
                                            * /
         -- Must be unique in this file
/
/*
      Example
      CLASS = 1
CLASS = 1
/*
       Name of File Type.
         -- Must be a string, max len 40 characters. Should
/*
         be meaningful in that the name indicates what sort of
/*
        data is stored within this file type.
/*
         -- There should be one of these for every File Type that */
/*
        can be associated with this ESDT.
/*
      Example
       FILETYPE NAME = "Instrument Band 7"
FILETYPE_NAME = ""
Maximum Number of Files under this Type.
/*
       -- Must be an integer.
/*
        -- Indicates the maximum number of files for the
        specified File Type.
/*
/*
         -- Must be less than 1000.
/*
      Example
       MAXIMUM NUM FILES = 10
MAXIMUM_NUM_FILES =
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
```

```
/******************************
/* Metadata Definition Object
/* Metadata Defintion objects are required if there are to be Metadata */
/* Checks or Metadata Queries on this ESDT. The object defines the */
/* metadata parameters and their types on which checks or queries will */
/* or can be performed.
/*
/* The actual values for the checks and/or queries are defined in the
/* PGE ODL file. All that needs to be defined in this ESDT ODL file is */
/* the computer data type of the value. NOTE that there can be a
/* Metadata Definition object in the ESDT file and NO corresponding
/* Metadata Checks or Query object in the PGE ODL file. But if there  */
/* is a Metadata Checks or Query object in the PGE ODL file, there MUST */
/* be a corresponding Metadata Defintion in the ESDT ODL file.
/* This object is optional (only needed if there are Metadata Checks */
/* or Metadata Query objects in the corresponding PGE ODL file). */
/* There may be many of these objects per ESDT file.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
OBJECT = METADATA_DEFINITION
/*
       Class (object counter, used only to distinguish objects)
       -- Must be an integer
/*
/*
          -- Must be unique in this file
/
/*
       Example
       CLASS = 1
CLASS = 1
/*
        Parameter name for possible check or query
        -- Must be a string, max len 40 characters */
-- Must be identical to parm name read in PGE ODL file */
/*
/*
/ *
       Example
       PARM_NAME = "tbd_parm_name"
PARM_NAME = ""
Container name above the parameter to be checked/queried */
/*
/*
           -- If not needed, should be set to "NONE".
          -- Must be filled in (correctly) if there is a container */
/*
          object or a group surrounding the parameter specified */
/*
          by PARM_NAME. This is because Inspects on granules */
/*
          can only be performed at the highest level
/*
         object in the metadata tree.
/*
          -- Must be a string, max len 100 characters */
         -- For Product Specific Attributes (PSAs) this must be
         set to "AdditionalAttibutes"
```

```
/*
        Example
        For metadata that looks as follows:
           GROUP = SOME GROUP NAME
            OBJECT = OBJECT_CONTAINER
                 CLASS = "1"
              OBJECT = PARAMETER_WE_ARE_QUERYING_ON
                   NUM_VAL = 1
                                   = "Value we want"
                   VALUE
                 END OBJECT = PARAMETER WE ARE QUERYING ON
                                                           * /
            END OBJECT = OBJECT CONTAINER
                                                 * /
          END_GROUP = SOME_GROUP_NAME
/*
        This parameter would be set as follows:
          CONTAINER NAME = "SOME GROUP NAME"
CONTAINER NAME = ""
Type of parameter for check or query
                                                     * /
         -- Must be one of {FLOAT,INT,STR}
/*
        Example
        TYPE = "INT"
TYPE = ""
/*****************************
   Optional Parameter. Defaults to empty string if not specified.
/*
                                            * /
/*
        Name of metadata parameter which provides a key into a
/*
       a multi-containered object. Such an object is the
/*
       MeasuredParameters group in the inventory metadata.
/*
           -- Must be a string, max len 40 characters.
/*
            -- Must be present in the ESDT ODL file for this ESDT.
/*
            -- Is matched with KEY_PARAMETER_VALUE to determine
             the entry in a mult-containered metadata group. */
          -- For Product Specific Attibutes (PSAs), this entry
          should NOT be specified.
          -- Because an ESDT may be used by more than one PGE, it
                                                           * /
                                                      * /
          is possible to have more than one
/*
                                                      * /
          KEY_PARAMETER_NAME/KEY_PARAMETER_VALUE pair
          (in multiple METADATA_DEFINITION objects)
          per ESDT ODL File. Any PGE ODL file may only have */
          a single KEY_PARAMETER_NAME/KEY_PARAMETER_VALUE pair. */
          -- For Metadata Checks or Quuries within the */
/*
          MeasuredParameters group this should be set to the
/*
          metadata field called "ParameterName".
/*
         Example:
           KEY_PARAMETER_NAME = "ParameterName"
    KEY_PARAMETER_NAME = ""
Optional Parameter. Must be preset if KEY_PARAMETER_NAME exists.
/*
  Defaults to the empty string if not specified.
/*
/*
        Value of metadata parameter which provides a key into a
```

```
/*
       a multi-containered object. Such an object is the
/*
       MeasuredParameters group in the inventory metadata.
/*
            -- Must be a string, max len 80 characters.
/*
            -- Must be present in the ESDT ODL file for this ESDT.
                                                          * /
            -- Is matched with KEY_PARAMETER_NAME to determine
              the entry in a mult-containered metadata group. */
                                                          * /
          -- For Product Specific Attibutes (PSAs), this entry
          should NOT be specified.
          -- Because an ESDT may be used by more than one PGE, it
                                                          * /
          is possible to have more than one
                                                     * /
/*
                                                     * /
           KEY_PARAMETER_NAME/KEY_PARAMETER_VALUE pair
          (in multiple METADATA_DEFINITION objects)
          per ESDT ODL File. Any PGE ODL file may only have
          a single KEY_PARAMETER_NAME/KEY_PARAMETER_VALUE pair. */
/*
          -- For Metadata Checks or Queries within the
/*
           MeasuredParameters group this should be set to the */
/*
           desired value of the metadata field called
/*
           "ParameterName".
/*
        Example:
/*
          KEY PARAMETER VALUE = "LandCoverage"
KEY PARAMETER VALUE = ""
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
/*****************************
END_OBJECT = METADATA_DEFINITION
/* Metadata Definition object may be repeated as needed
/******************************
/* Production Chain Object
/*
/* THIS OBJECT is only needed for those ESDTs that will be produced
/* by On Demand Production Requests (Production Requests that are */
/* generated as a result of a request for an On Demand Product).
/*
/* The Production Chain object surrounds a list (in order) of the
/* PGEs needed to produce a granule of this ESDT. There may be one
/* PGE in the list (if that PGE takes in DYnamic External data and
/* produces this ESDT), or a chain of PGEs (if PGE A produces an */
/* ESDT that is input to PGE B which produces THIS ESDT).
                                                          * /
/*
/* The information contained within this object will only be used if
/* an On Demand Request is for an ESDT which must have another
/* ESDT produced for the PGE that is to create the Product.
/*
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = PRODUCTION CHAIN
/*****************************
         Class (object counter, used only to distinguish objects) */
```

```
-- Must be an integer
     -- Must be an incose-
-- Must be unique in this file
       Example
       CLASS = 1
/***************************
  CLASS = 1
/* PGE In Chain Object
/* THIS OBJECT defines a PGE that is part of the Production Chain
/* used to produce this ESDT.
/* The Production Chain object surrounds a list (in order) of the
                                                   * /
/* PGEs needed to produce a granule of this ESDT. There may be one
/* PGE in the list (if that PGE takes in DYnamic External data and
/* produces this ESDT), or a chain of PGEs (if PGE A produces an */
/* ESDT that is input to PGE B which produces THIS ESDT).
                                                   * /
/*
/* The PGE IN CHAIN objects within the PRODUCTION CHAIN object define
/* the PGEs (in order) that need to be run to produce this ESDT. */
/* Only the PGE Name and Version are needed to identify the PGE, the
/* Profile Id will be the one with the DEFEAUL_PROFILE flag set. */
/* The information contained within this object will only be used if
/* an On Demand Request is for an ESDT which must have another
/* ESDT produced for the PGE that is to create the Product.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
OBJECT = PGE IN CHAIN
/*
    Class (object counter)
         -- Must be an integer
         -- Must be unique in this file
/*
       -- Is used in this case to determine the order of the
             PGEs. CLASS = 1 is the first PGE in the chain.
/*
       Example
       CLASS = 1
CLASS = 1
PGE name
       -- Must be a string, max len 10 characters
          -- The is the name of the PGE that makes up one entry */
              in the chain of PGEs.
/*
      Example
      PGE NAME = "ssit"
PGE NAME = ""
/* PGE version
```

```
-- Must be a string, max len 5 characters */
/*
          -- This is the version of the PGE that makes up one
/*
              entry in the chain of PGEs.
/*
       Example
         PGE VERSION = "1.0"
/******************************
 PGE VERSION = ""
/****************************
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END_OBJECT = PGE_IN_CHAIN
/* Repeat PGE_IN_CHAIN objects as needed to make up the Production
/******************************
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
END_OBJECT = PRODUCTION_CHAIN
/****************************
/* THE FOLLOWING LINE MUST NOT BE MODIFIED
END
A.1.3 ORBIT_ODL.template
/*
/*
        TEMPLATE ORBIT MODEL METADATA ODL FILE
/*
                                     * /
/* The SSIT operator's responsibility is to copy this file over and
/* edit it to add all necessary PDPS metadata values.
/* All ORBIT MODEL ODL files must reside in directory
                                                 * /
/* $DPAT_RULE_SCIENCE_MD (set in the configruation files).
/* The operator must add a value to the right of the "=" for each
                                                 * /
/* parameter.
                                                 * /
/* This file is only needed if the PGE has a period/boundary relating
                                                 * /
/* to orbit.
                                                 * /
/* There can be one or more ORBIT_MODEL objects defined in
/* this file so that multiple orbits can be defined for the same
                                                 * /
/* platform.
/*
                                                 * /
/* CHANGE LOG
                                         * /
/*
   -- Added Orbit_Path_Number.
                                    11/18/97
                                    01/05/98 */
   -- Changed acceptable Date Format.
```

```
/*
 -- Added another acceptable date format. 06/24/98 */
-- Updated length of PLATFORM. 08/13/98 */
/*
   -- Updated length of FLATFORM.
-- Fixed where this file is located in above
/*
                                  10/01/98 */
   comments.
/****************************
Spacecraft platform name for the Orbit Model. */
/*
/*
    -- Must be a string, max len 25 characters
Example
/* Example
/* PLATFORM = "TRMM"
PLATFORM = ""
/******************************
/* Orbit Model object
/* Defines the Orbit Model for a single orbit
                                          * /
/* Replicate for the defining of multiple orbits for the same platform. */
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
OBJECT = ORBIT_MODEL
/******************************
/*
      Class (object counter, used only to distinguish objects) */
/ *
       -- Must be an integer
/*
        -- Must be unique in this file for this type of object */
/*
        -- Must be greater than 0.
/ <del>*</del>
     Example
     CLASS = 1
CLASS = 1
/* Number of the Orbit
     -- Must be an integer
/*
                                      * /
/*
        -- Must be >= 0
/* Example
/* ORBIT_NUMBER = 12
ORBIT NUMBER =
/* Path Number of the Orbit
                                      * /
    -- Must be an integer
/*
/*
        -- Must be >= 0 and <= 233
                                  * /
/* Example /* ORBIT_PATH_NUMBER = 3
ORBIT PATH NUMBER =
```

```
/*
       The period of the orbit (a duration).
          -- Must contain a single P=V string, where */
/*
/*
          P is one of { MONTHS, WEEKS, DAYS, HOURS, MINS, SECS} */
/*
       Example
        ORBIT PERIOD = "HOURS=100"
ORBIT PERIOD = " "
/*
       The starting date/time of the orbit.
          -- Must contain the date and time of the orbit.
/*
          -- The format for the date/time string can be one of the */
/*
          follwoing:
/*
            "MMM DD YYYY HH:MM:SS", where
                                          * /
/*
            YYYY=4 digit year, MMM=3 character abreviation for
/*
         Month, DD=2 digit Day, HH=Hours, MM=Minutes,
/*
          SS=Seconds. The time is accepted as UTC.
/*
/*
              "MM/DD/YYYY HH:MM:SS"
/*
            YYYY=4 digit year, MM=2 digit Month,
                                                   * /
/*
         DD=2 digit Day, HH=Hours, MM=Minutes,
/*
         SS=Seconds. The time is accepted as UTC.
/*
         -- NOTE that the format for the date of MM/DD/YY will
/*
         no longer be accepted because it did not handle years
/*
         after 1999 correctly.
/*
       Example
/*
        ORBIT_START = "Oct 31 1996 22:01:55"
ORBIT START = " "
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END_OBJECT = ORBIT_MODEL
/* THE FOLLOWING LINE MUST NOT BE MODIFIED
/*****************************
A.1.4 TILE_ODL.template
/*
/*
        TEMPLATE TILE DEFINITION METADATA ODL FILE
/*
                                      */
/* The SSIT operator's responsibility is to copy this file over and
/* edit it to add all necessary PDPS metadata values.
/* Each Tile Scheme used by a PGE must have a corresponding TILE */
                                          * /
/* DEFINITION metadata ODL file.
/* All TILE DEFINITION ODL files must reside in directory
/* $DPAT_RULE_SCIENCE_MD. Each must be named TILE_<tile scheme>.odl
```

```
/* For a PGE to use a tile scheme, it must have SCHEDULE_TYPE = */
/* "Tile". TILE_SCHEME_TYPE must equal the tiling scheme to be used. */
/*
/* The operator must add a value to the right of the "=" for each
/* parameter.
/*
                                            * /
/*
/* CHANGE LOG
/*
    -- Removed the concept of CLUSTERs.
                                           01/18/98 */
/*
     Added COORDINATE object.
/*
    -- Updated various descriptions to make them better. 02/04/98 */
/*
                                       * /
/*
                                       * /
/*
        Tile Scheme
/*
                                                * /
          -- Must be a string, max len 20 characters
/*
         -- There can be NO spaces in the string.
/*
          -- Tile Scheme must be identical to
/*
               Tile Scheme used as part of ODL filename,
/*
               which in turn was generated from the
/*
               TILE_SCHEME_NAME in the PGE ODL file.
/*
       Example
       TILE_SCHEME_NAME = "Earth_Squared"
TILE SCHEME NAME = " "
/******************************
/* Tile object
/*
/* Defines a tile for the scheme defined by TILE SCHEME NAME.
/* Each tile must be defined seperately, with an ID, and associated */
/* coordinates.
/*
/* There should be a Tile object for every tile in the Tiling Scheme.
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = TILE
/*
       Class (object counter, used only to distinguish objects) */
/*
          -- Must be an integer
/*
          -- Must be unique in this file for this type of object
/*
          -- Must be greater than 0.
/*
       Example
       CLASS = 1
  CLASS = 1
/*
      ID of Tile
/*
         -- Must be an integer
          -- Must greater than 0 but less than max integer. */
         -- Tiles should be listed sequentially (though no */
```

```
checking for this is done by software).
          -- This must be unique throughout the system. This */
            means that if this Tile Id is defined in other Tile */
         Schemes, it must have the same coordinates and */
           description.
       Example
       TILE ID = 12
TILE ID =
/******************************
     Description of a Tile
     -- A String of characters, max 255.
/*
      -- Describes what the Tile is for, perhaps its geographic location or area that it covers. */
       Example
   Example

TILE_DESCRIPTION = "Upper North America"
TILE DESCRIPTION = ""
/* Tile Coordinate object
/* Defines a coordinate (Latitude and Longitude) for a tile.
/* Each tile must have at least 4 TILE_COORDINATE objects defined. More */
/* (than 4) such objects are permitted to better define the tile. */
/*
/* lines were drawn between the points in the order they are given the */
/* desired shape would be drawn.
/*
/*
/*
/*
/* For example:
  Coordinate 1 Coordinate 2
/*
/*
/*
/*
/*
          ·
o<-----o
/*
         Cooridnate 4 Coordinate 3
/*
/*
/*
   Or:
/*
         Coordinate 2 Coordinate 3
          Cooridnate 1 Coordinate 4
/*
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
```

```
/*****************************
 OBJECT = TILE_COORDINATE
Class (object counter, used only to distinguish objects)
/*
       -- Must be an integer
/*
       -- Must be unique in this file for this type of object
                                    * /
/*
       -- Must be greater than 0.
/*
     Example
     CLASS = 1
 CLASS = 1
/*
    Latitude Coordinate
      -- Must be one per Coordinate object.
/*
/*
      -- Must be an float
/*
     Example
     LATITUDE = 12.15
LATITUDE =
/*
    Longitude Coordinate
/*
      -- Must be one per Coordinate object.
/*
      -- Must be an float
                              * /
/*
     Example
     LONGITUDE = -43.22
LONGITUDE =
/*****************************
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END_OBJECT = TILE_COORDINATE
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present */
END OBJECT = TILE
/*****************************
/* THE FOLLOWING LINE MUST NOT BE MODIFIED
/******************************
END
A.1.5 PATHMAP_ODL.template
* /
/*
     TEMPLATE PATHMAP DEFINITION METADATA ODL FILE
```

```
/*
/* The SSIT operator's responsibility is to copy this file over and
/* edit it to add all necessary PATH MAP metadata values.
/* A PATHMAP defines the mapping between Absolute Path Number
/* a sequential numbering from 1-233 and Mapped Path Number which
/* is the intrepeted 1-233 number.
                                                         * /
/* If a PGE defines a PATHMAP in the PGE ODL then there must be a
                                                         * /
/* matching PATHMAP DEFINITION metadata ODL file and the PGE must have
                                                         * /
/* a SCHEDULE_TYPE = "Orbit".
/*
/* All PATHMAP DEFINITION ODL files must reside in directory
/* $DPAT_RULE_SCIENCE_MD. Each must be named
/* PATHMAP_<Pathmap_Name>.odl. Note there can be NO spaces in the
/* Pathmap_Name because it is used as a filename.
                                                         * /
/* For a PGE to use a PATHMAP, the PATHMAP NAME parameter in the PGE
/* ODL file must equal the Pathmap Name to be used.
/* The operator must add a value to the right of the "=" for each
/* parameter.
/*
/*
/* CHANGE LOG
/*
/*
/*
        Spacecraft platform name for the Orbit Model.
/*
       -- Must be a string, max len 20 characters
/
/*
                                                         * /
       Example
       PLATFORM = "TRMM"
PLATFORM = ""
/******************************
        Pathmap Name
/ *
         -- Must be a string, max len 25 characters
         -- There can be NO spaces in the string.
-- Pathmap Name must be identical to
/*
/*
/*
                Pathmap Name used as part of ODL filename,
/*
                which in turn was generated from the
/*
                PATHMAP NAME in the PGE ODL file.
/*
       Example
                                                         * /
        PATHMAP_NAME = "Some_Pathmap"
PATHMAP_NAME = " "
/******************************
/* Pathmap Entry Object
/*
                                                         * /
/* Defines a mapping between Absolute Path Number
/* a sequential numbering from 1-233 and Mapped Path Number which
/* is the intrepeted 1-233 number.
```

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```
/* There should be a Pathmap Entry object for each 1-233 Path Number.
/* An error will be returned if one of the path numbers is missed.
                                     * /
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
OBJECT = PATHMAP ENTRY
Class (object counter, used only to distinguish objects)
       -- Must be an integer
       -- Must be unique in this file for this type of object
       -- Must be greater than 0.
     Example
     CLASS = 1
/*****************************
   CLASS = 1
Absolute Path Number
       -- Must be an integer
       -- Must be between 1-233.
/
/*
···
     Example
     ABSOLUTE_PATH = 20
   ABSOLUTE_PATH =
/*
     Mapped Path Number
/*
     -- Must be an integer.
       -- Must be between 1-233.
/*
                                     * /
     Example
     MAPPED PATH = 27
MAPPED PATH = ""
/* THE FOLLOWING LINE MUST NOT BE MODIFIED if it is present
END OBJECT = PATHMAP ENTRY
/* THE FOLLOWING LINE MUST NOT BE MODIFIED
END
```

A.2 Typical ASTER PGE & ESDT ODL Files

Listings are provided for the following ASTER ODL files:

- A.2.1 ASTER PGE ODL file for PGE_NAME BTS
- A.2.2 ASTER ESDT ODL file for DATA TYPE NAME AST LIB
- A.2.3 ASTER ESDT ODL file for DATA_TYPE_NAME AST_ANC
- A.2.4 ASTER ESDT ODL file for DATA_TYPE_NAME AST_04
- A.2.5 ASTER ESDT ODL file for DATA_TYPE_NAME AST_09T

AST_LIB, AST_ANC and AST_04 are referenced within the PGE.

A typical ASTER PGE will differ from the example here by the PGE_NAME, the specific input/output files referenced, and runtime parameters. However, the overall structure of a given ASTER PGE ODL file would be similar to the one used here. (N.B. The ODL files shown here are associated with the ASTER version v2.2.34 software)

A.2.1 ASTER PGE BTS ODL

```
PGE NAME = "BTS"
PGE VERSION = "2.2h"
PROFILE_ID = 1
PROFILE_DESCRIPTION = "ASTER Brightness Temp with QA"
PLATFORM = "AM1"
INSTRUMENT = "ASTER"
MINIMUM OUTPUTS = 1
SCHEDULE TYPE = "Data"
PROCESSING_PERIOD = "SECS=1"
PROCESSING_BOUNDARY = "START_OF_SEC"
PGE_SSW_VERSION = "2.2h"
OBJECT = PCF_ENTRY
  CLASS = 11
   LOGICAL_ID = 15004
  PCF FILE TYPE = 1
  DATA_TYPE_NAME = "AST_L1B"
  DATA_TYPE_VERSION = "001"
  DATA_TYPE_REQUIREMENT = 1
   INPUT_TYPE = "Required"
  KEY INPUT = "Y"
  NUMBER NEEDED = 1
/**** Entry needed for all I/O (except for Temporary) ****/
/**** Only modify if multiple files and/or file types for this PCF entry ****/
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
/*Bright-Temp-LUT-v3.hdf*/
OBJECT = PCF ENTRY
   CLASS = 12
  LOGICAL_ID = 15330
   PCF_FILE_TYPE = 1
   DATA_TYPE_NAME = "AST_ANC"
   DATA_TYPE_VERSION = "001"
   DATA_TYPE_REQUIREMENT = 1
   SCIENCE\_GROUP = L1
   INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
```

```
/**** Entry needed for all I/O (except for Temporary) ****/
/**** Only modify if multiple files and/or file types for this PCF entry ****/
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
/**** "atmcorr-v3-dec.hdf" ****/
  CLASS = 29
  LOGICAL_ID = 15152
  PCF_FILE_TYPE = 3
  DATA_TYPE_NAME = "AST_ANC"
  DATA_TYPE_VERSION = "001"
  DATA_TYPE_REQUIREMENT = 1
  SCIENCE GROUP = "L2"
  INPUT TYPE = "Required"
  NUMBER NEEDED = 1
/**** Entry needed for all I/O (except for Temporary) ****/
/**** Only modify if multiple files and/or file types for this PCF entry ****/
   OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
/**** "FBA_Filter_File_1.cal" ****/
  CLASS = 30
  LOGICAL ID = 15151
  PCF FILE TYPE = 3
  DATA TYPE NAME = "AST ANC"
  DATA TYPE VERSION = "001"
  DATA TYPE REQUIREMENT = 1
  SCIENCE GROUP = "030"
  INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
/**** Entry needed for all I/O (except for Temporary) ****/
/**** Only modify if multiple files and/or file types for this PCF entry ****/
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
/* QA2-binning-intervals-v1.cal */
OBJECT = PCF ENTRY
  CLASS = 13
  LOGICAL_ID = 15913
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "AST_ANC"
  DATA_TYPE_VERSION = "001"
  DATA_TYPE_REQUIREMENT = 1
  SCIENCE GROUP = 098
  INPUT TYPE = "Required"
  NUMBER NEEDED = 1
/**** Entry needed for all I/O (except for Temporary) ****/
/*** Only modify if multiple files and/or file types for this PCF entry ****/
```

```
OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
/**/
/* QA thresholds.dat */
OBJECT = PCF ENTRY
  CLASS = 14
  LOGICAL ID = 15120
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "AST_ANC"
  DATA_TYPE_VERSION = "001"
  DATA_TYPE_REQUIREMENT = 1
  SCIENCE GROUP = 097
  INPUT_TYPE = "Required"
  NUMBER NEEDED = 1
/**** Entry needed for all I/O (except for Temporary) ****/
/**** Only modify if multiple files and/or file types for this PCF entry ****/
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
/*Output Product*/
OBJECT = PCF ENTRY
  CLASS = 15
  LOGICAL ID = 15010
  PCF FILE TYPE = 2
  DATA TYPE NAME = "AST 04"
  DATA_TYPE_VERSION = "001"
  YIELD = 1
  ASSOCIATED MCF ID = 15114
  SCIENCE GROUP = "S1"
  INSTANCE = 0
  MINIMUM_SIZE = 5
  MAXIMUM_SIZE = 10
/**** Entry needed for all I/O (except for Temporary) ****/
/**** Only modify if multiple files and/or file types for this PCF entry ****/
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 126
  LOGICAL_ID = 15015
  PCF_FILE_TYPE = 2
  DATA_TYPE_NAME = "ASTALGRN"
  DATA_TYPE_VERSION = "001"
  YIELD = 1
  SCIENCE GROUP = "S3"
  ASSOCIATED MCF ID = 15119
  INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM SIZE = 0
```

```
/**** Entry needed for all I/O (except for Temporary) ****/
/**** Only modify if multiple files and/or file types for this PCF entry ****/
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 16
  LOGICAL ID = 15602
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "PGE Major Version"
  PGE_PARAMETER_DEFAULT = "2"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 17
  LOGICAL ID = 15603
  PCF FILE TYPE = 5
  PGE PARAMETER NAME = "PGE Minor Version"
  PGE_PARAMETER_DEFAULT = "2"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 18
  LOGICAL ID = 16200
  PCF_FILE_TYPE = 5
  PGE PARAMETER NAME = "QA PGE Major Version"
   PGE_PARAMETER_DEFAULT = "2"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 19
  LOGICAL_ID = 16201
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "QA PGE Minor Version"
  PGE_PARAMETER_DEFAULT = "2"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 20
  LOGICAL ID = 15604
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Brightness Temperature LUT"
  PGE_PARAMETER_DEFAULT = "3"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 139
  LOGICAL ID = 15167
  PCF FILE_TYPE = 5
  PGE PARAMETER NAME = "BrtTmp Lookup Table Version"
   PGE PARAMETER DEFAULT = "3"
```

```
PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 22
  LOGICAL ID = 15165
  PCF FILE_TYPE = 5
  PGE PARAMETER NAME = "Atmos Corr. LUT Version"
   PGE_PARAMETER_DEFAULT = "3"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 24
  LOGICAL_ID = 15166
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "FBA Filters File Version"
   PGE_PARAMETER_DEFAULT = "3"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 21
  LOGICAL_ID = 15914
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "QA2 Binning Interval Version"
  PGE_PARAMETER_DEFAULT = "1"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 135
  LOGICAL ID = 15320
  PCF FILE TYPE = 5
  PGE_PARAMETER_NAME = "Alert File indirection"
  PGE_PARAMETER_DEFAULT = "15015:1"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 135
  LOGICAL_ID = 15321
  PCF FILE TYPE = 5
  PGE PARAMETER NAME = "PGE Name"
   PGE PARAMETER DEFAULT = "Brightness Temperature at the Sensor"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
END
```

A.2.2 ASTER ESDT AST_LIB ODL

```
DATA_TYPE_NAME = "AST_L1B"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "ASTER"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "ASTER Level 1B Data Set Registered Radiance at the Sensor"

PROVIDER = "EROS Data Center"
```

```
NOMINAL_SIZE = 120.0

PROCESSING_LEVEL = "L1"

HDF_DATA = "N"

DYNAMIC_FLAG = "E"

PREDICTION_METHOD = "NONROUTINE"

SUPPLIER_NAME = "EDC"

PERIOD = "SECS=1"

DURATION = "SECS=1"

BOUNDARY = "START_OF_SEC"

DELAY = 1

SPATIAL_FLAG = "Y"

ARCHIVED_AT = "EDC"

PROCESSED_AT = "EDC"
```

A.2.3 ASTER ESDT AST ANC ODL

```
DATA_TYPE_NAME = "AST_ANC"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "ASTER"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "HDF Ancillary data for ASTER"

PROVIDER = "Goddard Space Flight Center"

PROCESSING_LEVEL = "L1"

HDF_DATA = "Y"

NOMINAL_SIZE = 1.0

DYNAMIC_FLAG = "S"
```

A.2.4 ASTER ESDT AST 04 ODL

```
DATA_TYPE_NAME = "AST_04"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "ASTER"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "ASTER Level 2 Brightness Temperature at the Sensor"

PROVIDER = "Goddard Space Flight Center"

PROCESSING_LEVEL = "L1"

HDF_DATA = "Y"

NOMINAL_SIZE = 4.744895

DYNAMIC_FLAG = "I"

ARCHIVED_AT = "EDC"

PROCESSED_AT = "EDC"
```

A.2.5 ASTER ESDT AST 09T ODL

```
DATA_TYPE_NAME = "AST_09T"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "ASTER"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "ASTER Level 2 Surface Radiance Product (TIR)"
```

```
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 9.439935
PROCESSING_LEVEL = "L1"
HDF_DATA = "Y"
DYNAMIC_FLAG = "I"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "EDC"
PERIOD = "SECS=1"
BOUNDARY = "START_OF_SEC"
DELAY = 1
SPATIAL_FLAG = "N"
ARCHIVED_AT = "EDC"
PROCESSED_AT = "EDC"
```

END

A.3 Typical MISR PGE & ESDT ODL Files

Listings are provided for the following MISR ODL files:

- A.3.1 MISR PGE ODL file for PGE_NAME MPGE1 (M1AN)
- A.3.2 MISR ESDT MISANCGM ODL
- A.3.3 MISR ESDT MIRCCT ODL
- A.3.4 MISR ESDT MISLOAN ODL
- A.3.5 MISR ESDT ActSched ODL
- A.3.6 MISR ESDT MIANCSSC ODL
- A.3.7 MISR ESDT MIANCAGP ODL
- A.3.8 MISR ESDT MIANPPAN ODL
- A.3.9 MISR ESDT MISL0SY1 ODL
- A.3.10 MISR ESDT MISL0SY2 ODL
- A.3.11 MISR ESDT MISL0SY3 ODL
- A.3.12 MISR ESDT MIRFOIAN ODL
- A.3.13 MISR ESDT MIB2GEOP ODL
- A.3.14 MISR ESDT MIANCARP ODL (Version# 001)
- A.3.15 MISR ESDT MIANCARP ODL (Version# 002)
- A.3.16 MISR ESDT MICNFG ODL
- A.3.17 MISR ESDT AM1EPHN0 ODL
- A.3.18 MISR ESDT AM1ATTNF ODL
- A.3.19 MISR ESDT MIANRCCH ODL

- A.3.20 MISR ESDT MIL1A ODL
- A.3.21 MISR ESDT MISBR ODL
- A.3.22 MISR ESDT MISQA ODL
- A.3.23 MISR ESDT MI1B2T ODL
- A.3.24 MISR ESDT MI1B2E ODL
- A.3.25 MISR ESDT MIRCCM ODL
- A.3.26 MISR ESDT MI1B1 ODL
- A.3.27 MISR ESDT MIB1LM ODL

A typical MISR PGE will differ from the example here by the PGE_NAME, the specific input/output files referenced, and runtime parameters. However, the overall structure of a given MISR PGE ODL file would be similar to the one used here. (N.B. The ODL files shown here are associated with the MISR version v2.1.3 Patch 2 software.)

A.3.1 MISR PGE MPGE1AN ODL (profile #1)

```
PGE NAME = "M1AN"
PGE VERSION = "21302"
PROFILE ID = 1
PROFILE_DESCRIPTION = "MISR PGE 1 AN - Version V21302, SSI&T 17 March 2001"
PLATFORM = "AM1"
INSTRUMENT = "MISR"
/* MISR PGE 1 produces at a minimum 11 output files including QA
                                                                  * /
MINIMUM_OUTPUTS = 11
SCHEDULE TYPE = "Orbit"
PROCESSING_PERIOD = "ORBITS=1"
PROCESSING_BOUNDARY = "START_OF_ORBIT"
PATHMAP NAME = "MISR"
/* PGE_SSW_VERSION should match the PGE_VERSION
                                                                  * /
PGE_SSW_VERSION = "21302"
OBJECT = EXIT_MESSAGE
  CLASS= 1
  EXIT\_CODE = 0
  EXIT_MESSAGE = "CODE(0): Successful Completion of MISR PGE 1 AN"
END OBJECT = EXIT MESSAGE
OBJECT = EXIT MESSAGE
  CLASS= 2
  EXIT CODE = 202
  EXIT_MESSAGE = "CODE(202): Execution Failure of MISR PGE 1 AN"
END_OBJECT = EXIT_MESSAGE
```

```
/*
                                                                                                                                                        * /
                                            MISR PGE 1 AN Inputs
 /*
             Inputs:
 /*
             LID ESDT. Version Science Group
 /* Inputs:
/* LID ESDT.Version Science Group
/* 190 MISANCGM.002 Dynamic External Input
/* 227 MIRCCT.001 L4003
/* 243 MIRCCT.001 L9001
/* 250 MICNFG.001 C1205
/* 252 MICNFG.001 Dynamic External Input
/* 555 MISLOSY1.001 Dynamic External Input
/* 556 MISLOSY2.001 Dynamic External Input
/* 557 MISLOSY3.001 Dynamic External Input
/* 599 MICNFG.001 C1415
/* 1101 MICNFG.001 C1005
/* 1120 Actsched.001 Dynamic External Input
/* 1304 MIANCAGP.001 C0002
/* 1305 MIANPPAN.001 L1001
/* 1306 MIRFOIAN.001 L1001
/* 1334 MIB2GEOP.001 Dynamic Internal Input
/* 1500 MIANCARP.001 C0010
/* 1501 MIANCARP.001 C0010
/* 1501 MIANCARP.001 C0011
/* 1502 MIANCARP.001 C0011
/* 1503 MIANCARP.001 C0011
/* 1504 MIANCARP.001 C0011
/* 1505 MIANCARP.001 C0011
/* 1501 MIANCARP.001 C0011
/* 1502 MIANCARP.001 C0011
/* 1503 MIANCARP.001 C0011
/* 1504 MIANCARP.001 C0011
/* 1505 MIANCARP.001 C0011
/* 1507 MIANCARP.001 C0011
/* 1508 MIANCARP.001 C0011
/* 1509 MIANCARP.001 C0011
/* 1500 MIANCARP.001 C0011
/* 1501 MIANCARP.001 C0011
/* 1502 MIANCARP.001 C1105
/* 1984 MICNFG.001 Dynamic Internal Input
/* 10502 AMIATTNF.001 Dynamic Internal Input
/* 10502 AMIATTNF.001 Dynamic Internal Input
/* 10502 AMIATTNF.001 Dynamic Internal Input
 /*
                                            MISR PGE 1 AN Inputs
 /* Inputs:
                                                                                                                                                       * /
                                                                                                                                                       * /
 /*
  /*
                 PCF Entry for 190:MISANCGM
                                                                                                                                                       * /
  /*
                 MISR Ancillary Dataset for Camera Model OBJECT = PCF_ENTRY
       CLASS = 11
       LOGICAL ID = 190
       PCF_FILE_TYPE = 1
       DATA_TYPE_NAME = "MISANCGM"
       DATA_TYPE_VERSION = "002"
       MIN GRANULES REQUIRED = 1
       MAX GRANULES REQUIRED = 1
       INPUT TYPE = "Required"
       NUMBER NEEDED = 1
        QUERY TYPE = "Temporal"
       SPATIAL TIME DELTA = 0
       KEY_INPUT = "N"
       CLOSEST_QUERY_OFFSET = "WEEKS=9"
       CLOSEST_QUERY_DIRECTION = "Backward"
       CLOSEST_QUERY_RETRIES = 6
        OBJECT = FILETYPE
             FILETYPE_NAME = "Single File Granule"
             CLASS = 1
        END OBJECT = FILETYPE
  END OBJECT = PCF ENTRY
```

```
PCF Entry for 227:MIRCCT
                                                                         * /
       MISR RC Thresholds datasetOBJECT = PCF_ENTRY
  CLASS = 12
  LOGICAL_ID = 227
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MIRCCT"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
   SCIENCE GROUP = "L4003"
  INPUT TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
       PCF Entry for 243:MIRCCT
                                                                         * /
      MISR RC Thresholds datasetOBJECT = PCF_ENTRY
  CLASS = 13
  LOGICAL_ID = 243
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MIRCCT"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  SCIENCE GROUP = "L9001"
  INPUT TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL TIME DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
      PCF Entry for 500:MISLOAN
/* LO AN data
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 14
  LOGICAL_ID = 500
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MISLOAN"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 2
  INPUT_TYPE = "Required"
  /* ALIGN DPR TIME WITH INPUT TIME = "Y" */
  ALIGN DPR TIME WITH INPUT TIME = "N"
  NUMBER NEEDED = 1
   QUERY TYPE = "Temporal"
```

```
SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
/* 4PY version */
  OBJECT = FILETYPE
     FILETYPE NAME = "Multi-File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
   OBJECT = AUXILIARY_LOGICAL_ID
     CLASS = 1
     AUX_LOGICAL_ID = 501
   END_OBJECT = AUXILIARY_LOGICAL_ID
END_OBJECT = PCF_ENTRY
       PCF Entry for 1120:ActSched
                                                                         * /
      Detailed Activity Schedule from EMOS
OBJECT = PCF ENTRY
  CLASS = 16
  LOGICAL ID = 1120
  PCF FILE TYPE = 1
  DATA TYPE NAME = "ActSched"
  DATA TYPE VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 2
  INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1301:MIANCSSC
/* MISR CSSC dataset
OBJECT = PCF_ENTRY
  CLASS = 17
  LOGICAL_ID = 1301
  PCF_FILE_TYPE = 1
  DATA TYPE NAME = "MIANCSSC"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REOUIRED = 1
   SCIENCE GROUP = "C0002"
  INPUT TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
```

```
PCF Entry for 1304:MIANCAGP
/*
      MISR Ancillary Geographic Product
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 18
  LOGICAL_ID = 1304
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MIANCAGP"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
   SCIENCE_GROUP = "L0002"
   INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Metadata"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
  OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
   OBJECT = METADATA_QUERY
     CLASS = 1
     PARM_NAME = "SP_AM_PATH_NO"
     OPERATOR = "=="
      VALUE = "999"
     DATABASE_QUERY = "PATH NUMBER"
  END_OBJECT = METADATA_QUERY
END_OBJECT = PCF_ENTRY
       PCF Entry for 1305:MIANPPAN
      MISR Project Parameters (PP) dataset
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 19
  LOGICAL_ID = 1305
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MIANPPAN"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
   SCIENCE_GROUP = "L1001"
   INPUT TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY TYPE = "Metadata"
   SPATIAL TIME DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
   OBJECT = METADATA_QUERY
      CLASS = 1
      PARM_NAME = "SP_AM_PATH_NO"
     OPERATOR = "=="
     VALUE = "999"
     DATABASE_QUERY = "PATH NUMBER"
   END OBJECT = METADATA QUERY
```

```
PCF Entry for 555:MISLOSY1
      LO Out of Synch data
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 20
  LOGICAL ID = 555
  PCF FILE TYPE = 1
  DATA_TYPE_NAME = "MISLOSY1"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 2
  INPUT_TYPE = "Optional"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL TIME DELTA = 0
  KEY INPUT = "N"
  OBJECT = FILETYPE
     FILETYPE NAME = "Multi-File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
   OBJECT = AUXILIARY_LOGICAL_ID
     CLASS = 1
     AUX_LOGICAL_ID = 5551
   END_OBJECT = AUXILIARY_LOGICAL_ID
   OBJECT = OPTIONAL_INPUT
     CLASS = 1
     CATEGORY = "Out of Sync SY1"
     ORDER = 1
     RUNTIME PARM ID = 555
     TIMER = "SECS=10"
     TEMPORAL = "N"
   END OBJECT = OPTIONAL INPUT
END OBJECT = PCF ENTRY
       PCF Entry for 556:MISLOSY2
       LO Out of Synch data
OBJECT = PCF ENTRY
  CLASS = 21
  LOGICAL ID = 556
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MISLOSY2"
  DATA TYPE VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 2
   INPUT_TYPE = "Optional"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE NAME = "Multi-File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
   OBJECT = AUXILIARY LOGICAL ID
```

```
CLASS = 1
     AUX_LOGICAL_ID = 5561
   END_OBJECT = AUXILIARY_LOGICAL_ID
   OBJECT = OPTIONAL_INPUT
     CLASS = 1
     CATEGORY = "Out of Sync SY2"
     ORDER = 1
     RUNTIME PARM ID = 556
     TIMER = "SECS=10"
     TEMPORAL = "N"
   END OBJECT = OPTIONAL INPUT
END_OBJECT = PCF_ENTRY
       PCF Entry for 557:MISLOSY3
       LO Out of Synch data
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 22
  LOGICAL ID = 557
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MISLOSY3"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 2
   INPUT_TYPE = "Optional"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE NAME = "Multi-File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
   OBJECT = AUXILIARY_LOGICAL_ID
     CLASS = 1
     AUX_LOGICAL_ID = 5571
   END_OBJECT = AUXILIARY_LOGICAL_ID
   OBJECT = OPTIONAL_INPUT
     CLASS = 1
     CATEGORY = "Out of Sync SY3"
     ORDER = 1
     RUNTIME PARM ID = 557
     TIMER = "SECS=10"
     TEMPORAL = "N"
   END OBJECT = OPTIONAL_INPUT
END OBJECT = PCF ENTRY
       PCF Entry for 1306:MIRFOIAN
      MISR Reference Orbit Imagery
OBJECT = PCF ENTRY
  CLASS = 110
  LOGICAL_ID = 1306
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MIRFOIAN"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
```

```
MAX_GRANULES_REQUIRED = 1
   SCIENCE GROUP = "L1001"
   INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
   QUERY TYPE = "Metadata"
   SPATIAL TIME DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
   OBJECT = METADATA_QUERY
     CLASS = 1
      PARM_NAME = "SP_AM_PATH_NO"
      OPERATOR = "=="
      VALUE = "999"
     DATABASE_QUERY = "PATH NUMBER"
   END OBJECT = METADATA QUERY
END OBJECT = PCF ENTRY
      PCF Entry for 1334:MIB2GEOP
                                                                         * /
      MISR Geometric Parameters
OBJECT = PCF ENTRY
  CLASS = 111
  LOGICAL_ID = 1334
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MIB2GEOP"
  DATA_TYPE_VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  INPUT TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL TIME DELTA = 0
  KEY_INPUT = "N"
  OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
       PCF Entry for 1500:MIANCARP
       MISR Ancillary Radiometric Product
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 112
  LOGICAL_ID = 1500
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MIANCARP"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
   SCIENCE GROUP = "C0010"
   INPUT TYPE = "Required"
  NUMBER NEEDED = 1
   QUERY TYPE = "Temporal"
```

```
SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1501:MIANCARP
                                                                         * /
      MISR Ancillary Radiometric Product
OBJECT = PCF_ENTRY
  CLASS = 113
  LOGICAL_ID = 1501
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MIANCARP"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  SCIENCE GROUP = "C0011"
  INPUT TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1502:MIANCARP
      MISR Ancillary Radiometric Product
                                                                         * /
OBJECT = PCF_ENTRY
  CLASS = 114
  LOGICAL_ID = 1502
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MIANCARP"
  DATA_TYPE_VERSION = "002"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  INPUT TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
  CLOSEST_QUERY_OFFSET = "WEEKS=8"
  CLOSEST_QUERY_DIRECTION = "Backward"
  CLOSEST_QUERY_RETRIES = 10
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
```

```
PCF Entry for 1503:MIANCARP
/* MISR Ancillary Radiometric Product
OBJECT = PCF ENTRY
  CLASS = 115
  LOGICAL_ID = 1503
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MIANCARP"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  SCIENCE_GROUP = "C0012"
  INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
  OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 250:MICNFG
      MISR RCCM configuration file
OBJECT = PCF ENTRY
  CLASS = 116
  LOGICAL_ID = 250
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MICNFG"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  SCIENCE GROUP = "C1205"
  INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
       PCF Entry for 252:MICNFG
      MISR GRP configuration file
OBJECT = PCF_ENTRY
  CLASS = 117
  LOGICAL_ID = 252
  PCF_FILE_TYPE = 1
  DATA TYPE NAME = "MICNFG"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
```

```
SCIENCE GROUP = "C1305"
   INPUT _TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL TIME DELTA = 0
  KEY INPUT = "N"
  OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
      PCF Entry for 599:MICNFG
      MISR RAP configuration file
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 118
  LOGICAL ID = 599
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MICNFG"
  DATA TYPE VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  SCIENCE_GROUP = "C1415"
  INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
  OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1984:MICNFG
      MISR RP configuration file
OBJECT = PCF_ENTRY
  CLASS = 119
  LOGICAL ID = 1984
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MICNFG"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  SCIENCE_GROUP = "C1105"
  INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
```

```
/*** Attitude/Ephemeris/DEM entry. Please delete if not used by PGE. **/
       PCF Entry for 10501:AM1EPHN0
                                                                         * /
       Ephemeris data generated from DPREP
                                                                        * /
/*
      External Data Source
OBJECT = PCF ENTRY
  CLASS = 120
  LOGICAL ID = 10501
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "AM1EPHN0"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 2
   INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
/*** Attitude/Ephemeris/DEM entry. Please delete if not used by PGE. **/
/*
     PCF Entry for 10502:AM1ATTNF
                                                                         * /
      Attitude data generated by DPREP
                                                                         * /
/* External Data Source
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 121
  LOGICAL ID = 10502
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "AM1ATTNF"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 2
   INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL TIME DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
       PCF Entry for 1101:MICNFG
       MISR PCS configuration file
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 132
  LOGICAL ID = 1101
  PCF FILE TYPE = 1
```

```
DATA_TYPE_NAME = "MICNFG"
   DATA_TYPE_VERSION = "001"
   MIN_GRANULES_REQUIRED = 1
   MAX_GRANULES_REQUIRED = 1
   SCIENCE_GROUP = "C1005"
   INPUT TYPE = "Required"
   NUMBER NEEDED = 1
   OUERY TYPE = "Temporal"
   SPATIAL TIME DELTA = 0
   KEY INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
/******************************
/* MISR PGE 1 AN Outputs
/*
       Output:
     LID ESDT.Version Science
251 MIANRCCH.002 S4
600 MIL1A.001 S5
610 MISBR.002 S6
611 MISBR.002 S7
650 MISQA.002 S10
1375 MI1B2T.001 S2
1376 MI1B2E.001 S1
1377 MIRCCM.001 S3
1335 MISQA.002 S11
1336 MISQA.002 S12
1337 MISQA.002 S12
1337 MISQA.002 S13
1976 MI1B1.001 S8
1983 MIB1LM.001 S9
1985 MISQA.002 S14
1986 MISQA.002 S15
/*
       LID ESDT. Version Science Group Associated MCF
/*
                                                     1136
/*
                                                     1130
/*
                                                     1138
/*
                                                    1138
                                                   1137
/*
/*
                                                    1133
/*
                                                    1134
/*
                                                    1135
/*
                                                    11371
/*
                                                    11372
                                                                                 * /
/*
                                                    11373
/*
                                                    1140
/*
                                                    1131
                                                                                 * /
/*
                                                    11374
                                                                                 * /
/*
                                                     11375
                                                                                 * /
/*
                                                                                 * /
/*
        PCF Entry for 251:MIANRCCH
                                                                                  * /
/*
        MISR RC Histogram file
                                                                                  * /
OBJECT = PCF ENTRY
   CLASS = 136
   LOGICAL ID = 251
   PCF FILE TYPE = 2
   DATA TYPE NAME = "MIANRCCH"
   DATA TYPE VERSION = "002"
   MIN GRANULE YIELD = 1
   MAX_GRANULE_YIELD = 1
   ASSOCIATED_MCF_ID = 1136
   SCIENCE_GROUP = "S4"
   INSTANCE = 0
   MINIMUM_SIZE = 0
   MAXIMUM SIZE = 0
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
```

```
PCF Entry for 600:MIL1A
                                                                         * /
      MISR L1A Product
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 137
  LOGICAL_ID = 600
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MIL1A"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULE_YIELD = 1
  MAX_GRANULE_YIELD = 1
  ASSOCIATED_MCF_ID = 1130
  SCIENCE GROUP = "S5"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM SIZE = 0
  OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
      PCF Entry for 610:MISBR
/* MISR Browse data HDF file
OBJECT = PCF ENTRY
  CLASS = 138
  LOGICAL ID = 610
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MISBR"
  DATA TYPE VERSION = "002"
  MIN GRANULE YIELD = 0
  MAX GRANULE YIELD = 1
  ASSOCIATED_MCF_ID = 1138
  SCIENCE_GROUP = "S6"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM\_SIZE = 0
   OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
       PCF Entry for 611:MISBR
      MISR Browse data JPEG file
OBJECT = PCF_ENTRY
  CLASS = 139
  LOGICAL_ID = 611
  PCF_FILE_TYPE = 2
  DATA TYPE NAME = "MISBR"
  DATA TYPE VERSION = "002"
  MIN GRANULE YIELD = 0
  MAX GRANULE YIELD = 1
```

```
ASSOCIATED_MCF_ID = 1138
  SCIENCE GROUP = "S7"
  INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM SIZE = 0
  OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 650:MISQA
      MISR L1A QA
OBJECT = PCF ENTRY
  CLASS = 140
  LOGICAL ID = 650
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MISQA"
  DATA TYPE VERSION = "002"
  MIN GRANULE YIELD = 0
  MAX GRANULE YIELD = 1
  ASSOCIATED_MCF_ID = 1137
  SCIENCE_GROUP = "S10"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
  OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1375:MI1B2T
/* MISR L1B2 Terrain data
OBJECT = PCF ENTRY
  CLASS = 141
  LOGICAL_ID = 1375
  PCF_FILE_TYPE = 2
  DATA TYPE NAME = "MI1B2T"
  DATA TYPE VERSION = "001"
  MIN GRANULE YIELD = 1
  MAX GRANULE YIELD = 1
  ASSOCIATED MCF ID = 1133
  SCIENCE GROUP = "S2"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
  DISTINCT_VALUE = "AN"
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
```

```
PCF Entry for 1376:MI1B2E
/* MISR L1B2 Ellipsoid data
OBJECT = PCF ENTRY
  CLASS = 142
  LOGICAL_ID = 1376
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MI1B2E"
  DATA TYPE VERSION = "001"
  MIN GRANULE YIELD = 1
  MAX GRANULE YIELD = 1
  ASSOCIATED_MCF_ID = 1134
   SCIENCE_GROUP = "S1"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
  DISTINCT_VALUE = "AN"
  OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1377:MIRCCM
      MISR L1B2 RCCM data
OBJECT = PCF ENTRY
  CLASS = 143
  LOGICAL_ID = 1377
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MIRCCM"
  DATA TYPE VERSION = "001"
  MIN GRANULE YIELD = 1
  MAX GRANULE YIELD = 1
  ASSOCIATED_MCF_ID = 1135
  SCIENCE_GROUP = "S3"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
  DISTINCT_VALUE = "AN"
   OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1335:MISQA
      MISR L1B2 Terrain QA data
OBJECT = PCF ENTRY
  CLASS = 144
  LOGICAL_ID = 1335
  PCF_FILE_TYPE = 2
  DATA TYPE NAME = "MISQA"
  DATA TYPE VERSION = "002"
  MIN GRANULE YIELD = 0
  MAX GRANULE YIELD = 1
```

```
ASSOCIATED_MCF_ID = 11371
  SCIENCE GROUP = "S11"
  INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM SIZE = 0
  OBJECT = FILETYPE
     FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1336:MISQA
/* MISR L1B2 Ellipsoid QA data
OBJECT = PCF_ENTRY
  CLASS = 145
  LOGICAL_ID = 1336
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MISQA"
  DATA TYPE VERSION = "002"
  MIN GRANULE YIELD = 0
  MAX GRANULE YIELD = 1
  ASSOCIATED MCF ID = 11372
  SCIENCE_GROUP = "S12"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
  OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
  END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1337:MISQA
      MISR L1B2 RCCM QA data
OBJECT = PCF_ENTRY
  CLASS = 146
  LOGICAL_ID = 1337
  PCF_FILE_TYPE = 2
  DATA_TYPE_NAME = "MISQA"
  DATA TYPE VERSION = "002"
  MIN GRANULE YIELD = 0
  MAX GRANULE YIELD = 1
  ASSOCIATED MCF ID = 11373
  SCIENCE GROUP = "S13"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
  END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
/*
      PCF Entry for 1976:MI1B1
                                                                        * /
```

```
MISR L1B1 Radiometric Product
                                                                         * /
OBJECT = PCF ENTRY
  CLASS = 147
  LOGICAL_ID = 1976
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MI1B1"
  DATA TYPE VERSION = "001"
  MIN GRANULE YIELD = 1
  MAX GRANULE YIELD = 1
  ASSOCIATED MCF ID = 1140
  SCIENCE GROUP = "S8"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
  OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
      PCF Entry for 1983:MIB1LM
/* MISR L1B1 Local Mode data
OBJECT = PCF_ENTRY
  CLASS = 148
  LOGICAL_ID = 1983
  PCF_FILE_TYPE = 2
  DATA_TYPE_NAME = "MIB1LM"
  DATA_TYPE_VERSION = "001"
  MIN GRANULE YIELD = 0
  MAX_GRANULE_YIELD = 6
  ASSOCIATED MCF ID = 1131
  SCIENCE GROUP = "S9"
  INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM_SIZE = 0
  OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
  END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
      PCF Entry for 1985:MISQA
      MISR L1B1 QA data
OBJECT = PCF ENTRY
  CLASS = 149
  LOGICAL_ID = 1985
  PCF_FILE_TYPE = 2
  DATA_TYPE_NAME = "MISQA"
  DATA_TYPE_VERSION = "002"
  MIN_GRANULE_YIELD = 0
  MAX_GRANULE_YIELD = 1
  ASSOCIATED MCF ID = 11374
  SCIENCE GROUP = "S14"
  INSTANCE = 0
  MINIMUM SIZE = 0
```

```
MAXIMUM_SIZE = 0
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
       PCF Entry for 1986:MISQA
       MISR L1B1 Local Mode QA
                                                                         * /
OBJECT = PCF_ENTRY
CLASS = 150
 LOGICAL_ID = 1986
 PCF_FILE_TYPE = 2
 DATA_TYPE_NAME = "MISQA"
 DATA_TYPE_VERSION = "002"
 MIN GRANULE YIELD = 0
 MAX GRANULE YIELD = 6
 ASSOCIATED MCF ID = 11375
  SCIENCE GROUP = "S15"
 INSTANCE = 0
 MINIMUM_SIZE = 0
 MAXIMUM_SIZE = 0
 OBJECT = FILETYPE
   FILETYPE_NAME = "Single File Granule"
   CLASS = 1
 END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 151
  LOGICAL ID = 292
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Product version
  PGE_PARAMETER_DEFAULT = "0007"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 152
  LOGICAL ID = 295
  PCF FILE TYPE = 5
  PGE PARAMETER NAME = "Camera
  PGE PARAMETER DEFAULT = "An"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 153
  LOGICAL_ID = 620
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Ascii met file for HDF browse"
  PGE_PARAMETER_DEFAULT = "610:1"
  PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
```

```
OBJECT = PCF ENTRY
  CLASS = 154
  LOGICAL ID = 621
  PCF FILE_TYPE = 5
  PGE PARAMETER NAME = "Ascii met file for JPEG browse"
   PGE PARAMETER DEFAULT = "611:1"
  PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 155
  LOGICAL_ID = 1102
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "which pge
   PGE PARAMETER DEFAULT = "MISR PGE01"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 156
  LOGICAL_ID = 1104
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Orbit number
  PGE_PARAMETER_DEFAULT = "999999"
  PGE_PARAMETER_DYNAMIC_VALUE = "ORBIT NUMBER"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 157
  LOGICAL ID = 1103
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Orbit path
   PGE_PARAMETER_DEFAULT = "999"
  PGE_PARAMETER_DYNAMIC_VALUE = "PATH NUMBER"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 158
  LOGICAL ID = 10119
  PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Disabled status code list"
  PGE PARAMETER DEFAULT = "35870 163843126 163843127 163842611 163842612
166300169 164662287"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
END
```

A.3.2 MISR ESDT MISANCGM ODL

DATA_TYPE_NAME = "MISANCGM" DATA_TYPE_VERSION = "002"

```
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "Camera Geometric Model for Level 1B2"
PROVIDER = "Langley Research Center"
NOMINAL SIZE = 1.0
PROCESSING_LEVEL = "L1"
HDF DATA = "N"
DYNAMIC FLAG = "E"
PREDICTION METHOD = "NONROUTINE"
SUPPLIER NAME = "LARC"
/* BOUNDARY = "START_OF_YEAR" */
/* PERIOD = "YEARS=5"
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
  USED BY = "LARC"
END OBJECT = USE OBJECT
ARCHIVED_AT = "LARC"
PROCESSED AT = "LARC"
END
```

A.3.3 MISR ESDT MIRCCT ODL

```
DATA_TYPE_NAME = "MIRCCT"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Radiometric Camera-by-Camera Threshold dataset"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 10.0
PROCESSING_LEVEL = "L1B2"
HDF_DATA = "Y"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
END
```

A.3.4 MISR ESDT MISLOAN ODL

```
DATA_TYPE_NAME = "MISLOAN"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "MISR"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "MISR Level 0 CCD Science Data AN Camera"

PROVIDER = "Langley Research Center"

NOMINAL_SIZE = 1000.0

PROCESSING_LEVEL = "L0"

HDF_DATA = "N"

DYNAMIC_FLAG = "E"
```

```
PREDICTION_METHOD = "ROUTINE"
SUPPLIER NAME = "LARC"
/* PERIOD = "ORBITS=1" */
PERIOD = "HOURS=2"
/* BOUNDARY = "START OF ORBIT" */
BOUNDARY = "START OF DAY"
DURATION = "HOURS=2"
DELAY = 1
SPATIAL FLAG = "N"
OBJECT = USE OBJECT
  CLASS = 1
  USED BY = "LARC"
END OBJECT = USE_OBJECT
ARCHIVED AT = "LARC"
PROCESSED AT = "LARC"
OBJECT = FILETYPE
   CLASS = 2
   FILETYPE NAME = "Multi-File Granule"
  MAXIMUM NUM FILES = 2
END OBJECT = FILETYPE
END
```

A.3.5 MISR ESDT ActSched ODL

END

```
DATA_TYPE_NAME = "ActSched"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "Detailed Activity Schedule"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 1.0
/* Changed by Jim Galasso 10/9/1999
/* Processing Level cannot be LO multiple files using the same LID
/* Change of Processing level is to support PGE processing when 2 DAS
/* files are required because the PGE's DPR times span 2 files
PROCESSING_LEVEL = "SCHED"
HDF DATA = "N"
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
/* Q: Should the supplier of the DAS be identified as EMOS?
SUPPLIER_NAME = "EMOS"
PERIOD = "DAYS=1"
/* Boundary set for DAS files to be 2000 to 2000 each day
BOUNDARY = "START_OF_DAY-14400"
DURATION = "HOURS=24"
DELAY = 3600
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
```

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A.3.6 MISR ESDT MIANCSSC ODL

```
DATA_TYPE_NAME = "MIANCSSC"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Cloud Screening Surface Classification dataset"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 5.0
PROCESSING_LEVEL = "L1B2"
HDF_DATA = "Y"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
  CLASS = 1
  USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
END
```

A.3.7 MISR ESDT MIANCAGP ODL

```
DATA_TYPE_NAME = "MIANCAGP"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Ancillary Geographic Product"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 110.0
PROCESSING_LEVEL = "L1B2"
HDF_DATA = "Y"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "Y"
OBJECT = METADATA_DEFINITION
  CLASS = 1
   PARM_NAME = "SP_AM_PATH_NO"
  CONTAINER NAME = "AdditionalAttributes"
  TYPE = "STR"
END_OBJECT = METADATA_DEFINITION
OBJECT = USE_OBJECT
     CLASS = 1
  USED_BY = "LARC"
END_OBJECT = USE_OBJECT
END
```

A.3.8 MISR ESDT MIANPPAN ODL

```
DATA_TYPE_NAME = "MIANPPAN"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "MISR"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "MISR Projection Parameters Ancillary Dataset, Camera AN"
```

```
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 310.0
PROCESSING_LEVEL = "L1B2"
HDF DATA = "Y"
DYNAMIC FLAG = "S"
SPATIAL_FLAG = "Y"
OBJECT = USE_OBJECT
  CLASS = 1
  USED BY = "LARC"
END OBJECT = USE OBJECT
OBJECT = METADATA_DEFINITION
  CLASS = 1
  PARM_NAME = "SP_AM_PATH_NO"
  CONTAINER_NAME = "AdditionalAttributes"
  TYPE = "STR"
END_OBJECT = METADATA_DEFINITION
END
```

A.3.9 MISR ESDT MISL0SY1 ODL

```
DATA_TYPE_NAME = "MISLOSY1"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Out of Sync L0 CCSDS packets for APID = 373"
PROVIDER = "Langley Research Center"
PROCESSING_LEVEL = "L0"
HDF_DATA = "N"
/* Q: NOMINAL_SIZE ????
NOMINAL_SIZE = 5.9
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
PERIOD = "ORBITS=1"
/* PERIOD = "HOURS=2" */
BOUNDARY = "START_OF_ORBIT"
/* BOUNDARY = "START OF DAY+3600" */
DURATION = "ORBITS=1"
/* DURATION = "HOURS=2"
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
OBJECT = FILETYPE
   CLASS = 2
   FILETYPE_NAME = "Multi-File Granule"
  MAXIMUM_NUM_FILES = 2
END_OBJECT = FILETYPE
END
```

A.3.10 MISR ESDT MISL0SY2 ODL

```
DATA TYPE NAME = "MISLOSY2"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Out of Sync L0 CCSDS packets for APID = 374"
PROVIDER = "Langley Research Center"
PROCESSING_LEVEL = "L0"
HDF_DATA = "N"
/* Q: NOMINAL_SIZE ????
NOMINAL_SIZE = 5.9
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER NAME = "LARC"
PERIOD = "ORBITS=1"
/* PERIOD = "HOURS=2" */
BOUNDARY = "START_OF_ORBIT"
/* BOUNDARY = "START_OF_DAY+3600" */
DURATION = "ORBITS=1"
/* DURATION = "HOURS=2"
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
  USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED AT = "LARC"
PROCESSED_AT = "LARC"
OBJECT = FILETYPE
   CLASS = 2
   FILETYPE_NAME = "Multi-File Granule"
   MAXIMUM_NUM_FILES = 2
END_OBJECT = FILETYPE
END
```

A.3.11 MISR ESDT MISL0SY3 ODL

```
DATA_TYPE_NAME = "MISLOSY3"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Out of Sync LO CCSDS packets for APID = 378"
PROVIDER = "Langley Research Center"
PROCESSING_LEVEL = "L0"
HDF_DATA = "N"
/* Q: NOMINAL_SIZE ???? */
NOMINAL_SIZE = 5.9
DYNAMIC_FLAG = "E"
PREDICTION METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
PERIOD = "ORBITS=1"
/* PERIOD = "HOURS=2" */
BOUNDARY = "START_OF_ORBIT"
/* BOUNDARY = "START_OF_DAY+3600" */
DURATION = "ORBITS=1"
/* DURATION = "HOURS=2" */
```

```
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
OBJECT = FILETYPE
   CLASS = 2
   FILETYPE_NAME = "Multi-File Granule"
   MAXIMUM_NUM_FILES = 2
END_OBJECT = FILETYPE
```

A.3.12 MISR ESDT MIRFOIAN ODL

```
DATA TYPE NAME = "MIRFOIAN"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Reference Orbit Imagery Ancillary Dataset,
Camera AN"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 280.0
PROCESSING_LEVEL = "L1B2"
HDF_DATA = "Y"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
  USED_BY = "LARC"
END_OBJECT = USE_OBJECT
OBJECT = METADATA_DEFINITION
   CLASS = 1
   PARM_NAME = "SP_AM_PATH_NO"
   CONTAINER_NAME = "AdditionalAttributes"
   TYPE = "STR"
END_OBJECT = METADATA_DEFINITION
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
```

A.3.13 MISR ESDT MIB2GEOP ODL

END

```
DATA_TYPE_NAME = "MIB2GEOP"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "MISR"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "MISR Geometric Parameters"

PROVIDER = "Langley Research Center"

NOMINAL_SIZE = 6.0

PROCESSING_LEVEL = "L1B2"

HDF_DATA = "Y"
```

```
DYNAMIC_FLAG = "I"

SPATIAL_FLAG = "Y"

OBJECT = USE_OBJECT

CLASS = 1

USED_BY = "LARC"

END_OBJECT = USE_OBJECT

ARCHIVED_AT = "LARC"

PROCESSED_AT = "LARC"

END
```

A.3.14 MISR ESDT MIANCARP ODL (Version# 001)

```
DATA_TYPE_NAME = "MIANCARP"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Ancillary Radiometric Product (ARP)"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 5.0
PROCESSING_LEVEL = "All"
HDF_DATA = "Y"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "LARC"
END_OBJECT = USE_OBJECT
END
```

A.3.15 MISR ESDT MIANCARP ODL (Version# 002)

```
DATA_TYPE_NAME = "MIANCARP"
DATA_TYPE_VERSION = "002"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Ancillary Radiometric Product (ARP)"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 5.0
PROCESSING_LEVEL = "All"
HDF_DATA = "Y"
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "NONROUTINE"
/* PERIOD = "MONTHS=2" */
/* BOUNDARY = "START_OF_MONTH" */
SUPPLIER_NAME = "LARC"
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
  CLASS = 1
  USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
```

A.3.16 MISR ESDT MICNFG ODL

```
DATA TYPE NAME = "MICNFG"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Configuration File for all PGEs"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 0.5
PROCESSING_LEVEL = "All"
HDF DATA = "N"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
     CLASS = 1
      USED_BY = "LARC"
END_OBJECT = USE_OBJECT
END
```

A.3.17 MISR ESDT AM1EPHN0 ODL

```
DATA_TYPE_NAME = "AM1EPHN0"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "All"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "AM-1 L0/FDD Ephemeris data in Toolkit format"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 2.0
PROCESSING_LEVEL = "L1"
DYNAMIC_FLAG = "I"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
  CLASS = 1
  USED BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
HDF_DATA = "N"
END
```

A.3.18 MISR ESDT AM1ATTNF ODL

```
DATA_TYPE_NAME = "AM1ATTNF"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "A11"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "AM-1 FDD Attitude data in Toolkit format"

PROVIDER = "Goddard Space Flight Center"

NOMINAL_SIZE = 2.0

PROCESSING_LEVEL = "L1"
```

```
SPATIAL_FLAG = "N"

OBJECT = USE_OBJECT

CLASS = 1

USED_BY = "GSFC"

END_OBJECT = USE_OBJECT

ARCHIVED_AT = "GSFC"

PROCESSED_AT = "GSFC"

HDF_DATA = "N"

END
```

A.3.19 MISR ESDT MIANRCCH ODL

```
DATA_TYPE_NAME = "MIANRCCH"
DATA_TYPE_VERSION = "002"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Radiometric Camera-by-Camera Histogram Dataset"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 3.0
PROCESSING_LEVEL = "L1B2"
HDF_DATA = "N"
DYNAMIC_FLAG = "I"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
END
```

A.3.20 MISR ESDT MIL1A ODL

```
DATA_TYPE_NAME = "MIL1A"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Level 1A CCD Science data, all cameras"
PROVIDER = "Langley Research Center"
                                                                          * /
      Q: Need to find the correct nominal file size for MIL1A
/* NOMINAL_SIZE = 498.0 */
/* NOMINAL_SIZE = 12000.0 */
/* NOMINAL_SIZE = 100.0 */
NOMINAL_SIZE = 1500.0
PROCESSING_LEVEL = "L1A"
HDF DATA = "Y"
DYNAMIC_FLAG = "I"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
DELAY = 1
SPATIAL_FLAG = "N"
```

```
OBJECT = USE_OBJECT
CLASS = 1
USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
END
```

A.3.21 MISR ESDT MISBR ODL

```
DATA_TYPE_NAME = "MISBR"
DATA TYPE VERSION = "002"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Browse data for use with systematic QA analysis"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 3.0
PROCESSING_LEVEL = "L1B2"
HDF\_DATA = "Y"
DYNAMIC_FLAG = "I"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
  USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
END
```

A.3.22 MISR ESDT MISQA ODL

```
DATA_TYPE_NAME = "MISQA"
DATA_TYPE_VERSION = "002"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Quality Assurance data"
PROVIDER = "Langley Research Center"
      Increased to 20.0 from 1.0 by Jim Galasso 10/9/1999
                                                                  * /
NOMINAL_SIZE = 20.0
                                                             * /
      Changed to Processing Level all 10/9/1999
PROCESSING_LEVEL = "ALL"
HDF DATA = "Y"
DYNAMIC_FLAG = "I"
PREDICTION METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
PERIOD = "ORBITS=1"
BOUNDARY = "START_OF_ORBIT"
DURATION = "HOURS=2"
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
```

```
CLASS = 1
USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
END
```

A.3.23 MISR ESDT MI1B2T ODL

```
DATA_TYPE_NAME = "MI1B2T"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Level 1B2 Terrain Data"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 400.0
PROCESSING_LEVEL = "L1B2"
HDF_DATA = "Y"
DYNAMIC_FLAG = "I"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
DELAY = 1
SPATIAL_FLAG = "Y"
DISTINCT_PARAMETER = "AssociatedSensorShortName"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
OBJECT = METADATA_DEFINITION
   CLASS = 2
   PARM_NAME = "AssociatedSensorShortName"
   CONTAINER_NAME = "AssociatedPlatformInstrumentSensor"
   TYPE = "STR"
END_OBJECT = METADATA_DEFINITION
END
```

A.3.24 MISR ESDT MI1B2E ODL

```
DATA_TYPE_NAME = "MI1B2E"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "MISR"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "MISR Level 1B2 Ellipsoid Data"

PROVIDER = "Langley Research Center"

NOMINAL_SIZE = 700.0

PROCESSING_LEVEL = "L1B2"

HDF_DATA = "Y"

DYNAMIC_FLAG = "I"

PREDICTION_METHOD = "ROUTINE"

SUPPLIER_NAME = "LARC"

DELAY = 1

SPATIAL_FLAG = "Y"
```

```
DISTINCT_PARAMETER = "AssociatedSensorShortName"

OBJECT = USE_OBJECT

CLASS = 1

USED_BY = "LARC"

END_OBJECT = USE_OBJECT

ARCHIVED_AT = "LARC"

PROCESSED_AT = "LARC"

OBJECT = METADATA_DEFINITION

CLASS = 2

PARM_NAME = "AssociatedSensorShortName"

CONTAINER_NAME = "AssociatedPlatformInstrumentSensor"

TYPE = "STR"

END_OBJECT = METADATA_DEFINITION
```

A.3.25 MISR ESDT MIRCCM ODL

```
DATA TYPE NAME = "MIRCCM"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR radiometric camera-by-camera Cloud Mask"
PROVIDER = "Langley Research Center"
NOMINAL_SIZE = 3.0
PROCESSING_LEVEL = "L1B2"
HDF_DATA = "Y"
DYNAMIC_FLAG = "I"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
DELAY = 1
SPATIAL_FLAG = "Y"
DISTINCT_PARAMETER = "AssociatedSensorShortName"
OBJECT = USE_OBJECT
   CLASS = 1
  USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
OBJECT = METADATA_DEFINITION
   CLASS = 2
   PARM_NAME = "AssociatedSensorShortName"
   CONTAINER_NAME = "AssociatedPlatformInstrumentSensor"
   TYPE = "STR"
END_OBJECT = METADATA_DEFINITION
END
```

A.3.26 MISR ESDT MI1B1 ODL

```
DATA_TYPE_NAME = "MI1B1"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "MISR"

PLATFORM = "AM1"

DATA_TYPE_DESCRIPTION = "MISR Level 1B2 Ellipsoid Data"

PROVIDER = "Langley Research Center"

/* NOMINAL_SIZE = 574.0 */

/* changed for FILEWATCHER! */
```

```
/* NOMINAL_SIZE = 12000.0 */
/* NOMINAL SIZE = 100.0 */
NOMINAL_SIZE = 1500.0
PROCESSING_LEVEL = "L1B1"
HDF DATA = "Y"
DYNAMIC FLAG = "I"
PREDICTION METHOD = "ROUTINE"
SUPPLIER NAME = "LARC"
DELAY = 1
SPATIAL FLAG = "N"
OBJECT = USE OBJECT
   CLASS = 1
  USED_BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
END
```

A.3.27 MISR ESDT MIB1LM ODL

```
DATA_TYPE_NAME = "MIB1LM"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MISR"
PLATFORM = "AM1"
DATA_TYPE_DESCRIPTION = "MISR Level 1B1 Local Mode Radiance Data"
PROVIDER = "Langley Reseach Center"
NOMINAL_SIZE = 100.0
PROCESSING_LEVEL = "L1"
HDF_DATA = "Y"
DYNAMIC_FLAG = "I"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "LARC"
DELAY = 1
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
  USED BY = "LARC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "LARC"
PROCESSED_AT = "LARC"
END
```

A.3.28 MISR ORBIT ODL

```
ORBIT_PATH_NUMBER = 52

/* ORBIT_PERIOD = "SECS=5934" */
ORBIT_PERIOD = "SECS=5933"

/* ORBIT_START = "05/14/2001 10:41:32" */
ORBIT_START = "05/16/2001 02:14:44"

END_OBJECT = ORBIT_MODEL

END
```

A.3.29 MISR PATHMAP ODL

```
PLATFORM = "AM1"
PATHMAP_NAME = "MISR"
OBJECT = PATHMAP_ENTRY
    CLASS = 1
    ABSOLUTE\_PATH = 1
    MAPPED_PATH = 1
END_OBJECT = PATHMAP_ENTRY
OBJECT = PATHMAP ENTRY
    CLASS = 2
    ABSOLUTE PATH = 2
   MAPPED PATH = 17
END OBJECT = PATHMAP ENTRY
OBJECT = PATHMAP_ENTRY
    CLASS = 3
    ABSOLUTE PATH = 3
    MAPPED_PATH = 33
END_OBJECT = PATHMAP_ENTRY
OBJECT = PATHMAP_ENTRY
    CLASS = 4
    ABSOLUTE\_PATH = 4
    MAPPED_PATH = 49
END OBJECT = PATHMAP ENTRY
OBJECT = PATHMAP ENTRY
    CLASS = 5
    ABSOLUTE\_PATH = 5
    MAPPED PATH = 65
END_OBJECT = PATHMAP_ENTRY
OBJECT = PATHMAP_ENTRY
    CLASS = 6
    ABSOLUTE\_PATH = 6
    MAPPED_PATH = 81
END_OBJECT = PATHMAP_ENTRY
OBJECT = PATHMAP_ENTRY
    CLASS = 7
    ABSOLUTE PATH = 7
    MAPPED PATH = 97
END OBJECT = PATHMAP ENTRY
OBJECT = PATHMAP_ENTRY
    CLASS = 8
    ABSOLUTE PATH = 8
    MAPPED_PATH = 113
END_OBJECT = PATHMAP_ENTRY
```

OBJECT = PATHMAP_ENTRY CLASS = 9 $ABSOLUTE_PATH = 9$ $MAPPED_PATH = 129$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 10ABSOLUTE PATH = 10 MAPPED PATH = 145END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 11ABSOLUTE_PATH = 11 $MAPPED_PATH = 161$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 12ABSOLUTE_PATH = 12 MAPPED PATH = 177END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 13ABSOLUTE PATH = 13 $MAPPED_PATH = 193$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 14 $ABSOLUTE_PATH = 14$ $MAPPED_PATH = 209$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 15ABSOLUTE PATH = 15 MAPPED PATH = 225 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 16 $ABSOLUTE_PATH = 16$ $MAPPED_PATH = 8$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 17ABSOLUTE PATH = 17 MAPPED PATH = 24END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 18ABSOLUTE PATH = 18 $MAPPED_PATH = 40$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 19ABSOLUTE_PATH = 19 $MAPPED_PATH = 56$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 20ABSOLUTE PATH = 20 MAPPED PATH = 72

END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 21 $ABSOLUTE_PATH = 21$ MAPPED PATH = 88 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 22ABSOLUTE PATH = 22 MAPPED PATH = 104 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 23 $ABSOLUTE_PATH = 23$ $MAPPED_PATH = 120$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 24ABSOLUTE_PATH = 24 MAPPED PATH = 136 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 25 $ABSOLUTE_PATH = 25$ $MAPPED_PATH = 152$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 26ABSOLUTE_PATH = 26 $MAPPED_PATH = 168$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 27ABSOLUTE PATH = 27 MAPPED PATH = 184 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 28ABSOLUTE_PATH = 28 $MAPPED_PATH = 200$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 29ABSOLUTE_PATH = 29 MAPPED PATH = 216 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 30ABSOLUTE_PATH = 30 $MAPPED_PATH = 232$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 31 $ABSOLUTE_PATH = 31$ $MAPPED_PATH = 15$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 32ABSOLUTE PATH = 32

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 $MAPPED_PATH = 31$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 33ABSOLUTE PATH = 33 MAPPED PATH = 47END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 34ABSOLUTE PATH = 34 MAPPED PATH = 63END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 35ABSOLUTE_PATH = 35 $MAPPED_PATH = 79$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 36ABSOLUTE_PATH = 36 MAPPED PATH = 95 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 37 $ABSOLUTE_PATH = 37$ $MAPPED_PATH = 111$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 38ABSOLUTE PATH = 38 MAPPED PATH = 127END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 39ABSOLUTE PATH = 39 $MAPPED_PATH = 143$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 40ABSOLUTE_PATH = 40 $MAPPED_PATH = 159$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 41ABSOLUTE_PATH = 41 MAPPED PATH = 175 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 42 $ABSOLUTE_PATH = 42$ $MAPPED_PATH = 191$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 43ABSOLUTE_PATH = 43 MAPPED PATH = 207END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 44

 $ABSOLUTE_PATH = 44$ $MAPPED_PATH = 223$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 45ABSOLUTE PATH = 45 MAPPED PATH = 6END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 46ABSOLUTE PATH = 46 $MAPPED_PATH = 22$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 47 $ABSOLUTE_PATH = 47$ $MAPPED_PATH = 38$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 48ABSOLUTE PATH = 48 MAPPED PATH = 54END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 49 $ABSOLUTE_PATH = 49$ $MAPPED_PATH = 70$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 50ABSOLUTE PATH = 50 MAPPED PATH = 86 END OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 51ABSOLUTE PATH = 51 $MAPPED_PATH = 102$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 52 $ABSOLUTE_PATH = 52$ $MAPPED_PATH = 118$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 53ABSOLUTE PATH = 53 MAPPED PATH = 134END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 54 $ABSOLUTE_PATH = 54$ $MAPPED_PATH = 150$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 55ABSOLUTE PATH = 55 MAPPED PATH = 166 END OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY

CLASS = 56 $ABSOLUTE_PATH = 56$ $MAPPED_PATH = 182$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 57ABSOLUTE_PATH = 57 MAPPED PATH = 198 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 58ABSOLUTE_PATH = 58 $MAPPED_PATH = 214$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 59 $ABSOLUTE_PATH = 59$ MAPPED PATH = 230 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 60ABSOLUTE PATH = 60 MAPPED PATH = 13END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 61 $ABSOLUTE_PATH = 61$ $MAPPED_PATH = 29$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 62ABSOLUTE_PATH = 62 MAPPED PATH = 45END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 63 $ABSOLUTE_PATH = 63$ $MAPPED_PATH = 61$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 64ABSOLUTE_PATH = 64 MAPPED PATH = 77END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 65ABSOLUTE PATH = 65 $MAPPED_PATH = 93$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 66 $ABSOLUTE_PATH = 66$ $MAPPED_PATH = 109$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 67ABSOLUTE PATH = 67 MAPPED PATH = 125END OBJECT = PATHMAP ENTRY

OBJECT = PATHMAP_ENTRY CLASS = 68ABSOLUTE_PATH = 68 $MAPPED_PATH = 141$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 69ABSOLUTE PATH = 69 MAPPED PATH = 157END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 70 $ABSOLUTE_PATH = 70$ $MAPPED_PATH = 173$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 71ABSOLUTE PATH = 71 MAPPED PATH = 189 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 72ABSOLUTE PATH = 72 $MAPPED_PATH = 205$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 73ABSOLUTE_PATH = 73 $MAPPED_PATH = 221$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 74ABSOLUTE PATH = 74 MAPPED PATH = 4END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 75 $ABSOLUTE_PATH = 75$ $MAPPED_PATH = 20$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 76ABSOLUTE PATH = 76 MAPPED PATH = 36 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 77ABSOLUTE PATH = 77 $MAPPED_PATH = 52$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 78ABSOLUTE_PATH = 78 $MAPPED_PATH = 68$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 79ABSOLUTE PATH = 79 MAPPED PATH = 84

END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 80ABSOLUTE_PATH = 80 MAPPED PATH = 100 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 81ABSOLUTE PATH = 81 MAPPED PATH = 116 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 82ABSOLUTE_PATH = 82 $MAPPED_PATH = 132$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 83ABSOLUTE_PATH = 83 MAPPED PATH = 148 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 84ABSOLUTE_PATH = 84 $MAPPED_PATH = 164$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 85ABSOLUTE_PATH = 85 $MAPPED_PATH = 180$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 86ABSOLUTE PATH = 86 MAPPED PATH = 196 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 87ABSOLUTE_PATH = 87 $MAPPED_PATH = 212$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 88ABSOLUTE PATH = 88 MAPPED PATH = 228 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 89ABSOLUTE_PATH = 89 $MAPPED_PATH = 11$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 90 $ABSOLUTE_PATH = 90$ $MAPPED_PATH = 27$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 91ABSOLUTE PATH = 91

 $MAPPED_PATH = 43$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 92ABSOLUTE PATH = 92 MAPPED PATH = 59 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 93ABSOLUTE PATH = 93 MAPPED PATH = 75END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 94ABSOLUTE_PATH = 94 $MAPPED_PATH = 91$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 95ABSOLUTE_PATH = 95 MAPPED PATH = 107END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 96 $ABSOLUTE_PATH = 96$ $MAPPED_PATH = 123$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 97ABSOLUTE PATH = 97 MAPPED PATH = 139 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 98ABSOLUTE PATH = 98 $MAPPED_PATH = 155$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 99ABSOLUTE_PATH = 99 $MAPPED_PATH = 171$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 100ABSOLUTE PATH = 100 MAPPED PATH = 187 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 101 $ABSOLUTE_PATH = 101$ $MAPPED_PATH = 203$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 102 $ABSOLUTE_PATH = 102$ MAPPED PATH = 219END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 103

 $ABSOLUTE_PATH = 103$ $MAPPED_PATH = 2$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 104ABSOLUTE PATH = 104 MAPPED PATH = 18 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 105ABSOLUTE PATH = 105 $MAPPED_PATH = 34$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 106ABSOLUTE_PATH = 106 $MAPPED_PATH = 50$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 107ABSOLUTE PATH = 107 MAPPED PATH = 66 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 108ABSOLUTE_PATH = 108 $MAPPED_PATH = 82$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 109ABSOLUTE PATH = 109 MAPPED PATH = 98 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 110ABSOLUTE PATH = 110 $MAPPED_PATH = 114$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 111ABSOLUTE_PATH = 111 $MAPPED_PATH = 130$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 112ABSOLUTE PATH = 112 MAPPED PATH = 146 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 113 $ABSOLUTE_PATH = 113$ $MAPPED_PATH = 162$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 114ABSOLUTE PATH = 114 MAPPED PATH = 178END OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY

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CLASS = 115 $ABSOLUTE_PATH = 115$ $MAPPED_PATH = 194$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 116ABSOLUTE_PATH = 116 MAPPED PATH = 210 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 117 $ABSOLUTE_PATH = 117$ $MAPPED_PATH = 226$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 118ABSOLUTE_PATH = 118 MAPPED PATH = 9END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 119ABSOLUTE PATH = 119 $MAPPED_PATH = 25$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 120 $ABSOLUTE_PATH = 120$ $MAPPED_PATH = 41$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 121ABSOLUTE PATH = 121 MAPPED PATH = 57END OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 122 $ABSOLUTE_PATH = 122$ $MAPPED_PATH = 73$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 123 $ABSOLUTE_PATH = 123$ MAPPED PATH = 89 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 124ABSOLUTE PATH = 124 $MAPPED_PATH = 105$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 125 $ABSOLUTE_PATH = 125$ $MAPPED_PATH = 121$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 126ABSOLUTE_PATH = 126 MAPPED PATH = 137END OBJECT = PATHMAP ENTRY

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OBJECT = PATHMAP_ENTRY CLASS = 127 $ABSOLUTE_PATH = 127$ $MAPPED_PATH = 153$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 128ABSOLUTE PATH = 128 MAPPED PATH = 169END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 129 $ABSOLUTE_PATH = 129$ $MAPPED_PATH = 185$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 130ABSOLUTE PATH = 130 MAPPED PATH = 201 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 131ABSOLUTE PATH = 131 $MAPPED_PATH = 217$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 132 $ABSOLUTE_PATH = 132$ $MAPPED_PATH = 233$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 133ABSOLUTE PATH = 133 MAPPED PATH = 16 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 134 $ABSOLUTE_PATH = 134$ $MAPPED_PATH = 32$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 135ABSOLUTE PATH = 135 MAPPED PATH = 48END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 136ABSOLUTE PATH = 136 $MAPPED_PATH = 64$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 137 $ABSOLUTE_PATH = 137$ $MAPPED_PATH = 80$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 138ABSOLUTE PATH = 138 MAPPED PATH = 96

END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 139 $ABSOLUTE_PATH = 139$ MAPPED PATH = 112 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 140ABSOLUTE PATH = 140 MAPPED PATH = 128 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 141 $ABSOLUTE_PATH = 141$ $MAPPED_PATH = 144$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 142ABSOLUTE PATH = 142 MAPPED PATH = 160 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 143 $ABSOLUTE_PATH = 143$ $MAPPED_PATH = 176$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 144 $ABSOLUTE_PATH = 144$ $MAPPED_PATH = 192$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 145ABSOLUTE PATH = 145 MAPPED PATH = 208 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 146ABSOLUTE_PATH = 146 $MAPPED_PATH = 224$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 147ABSOLUTE PATH = 147 MAPPED PATH = 7END OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 148ABSOLUTE_PATH = 148 $MAPPED_PATH = 23$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 149 $ABSOLUTE_PATH = 149$ $MAPPED_PATH = 39$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 150

ABSOLUTE PATH = 150

 $MAPPED_PATH = 55$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 151ABSOLUTE PATH = 151 MAPPED PATH = 71END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 152ABSOLUTE PATH = 152 MAPPED PATH = 87 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 153 $ABSOLUTE_PATH = 153$ $MAPPED_PATH = 103$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 154ABSOLUTE PATH = 154 MAPPED PATH = 119 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 155 $ABSOLUTE_PATH = 155$ $MAPPED_PATH = 135$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 156ABSOLUTE PATH = 156 MAPPED PATH = 151 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 157ABSOLUTE PATH = 157 $MAPPED_PATH = 167$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 158 $ABSOLUTE_PATH = 158$ $MAPPED_PATH = 183$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 159ABSOLUTE_PATH = 159 MAPPED PATH = 199 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 160 $ABSOLUTE_PATH = 160$ $MAPPED_PATH = 215$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 161ABSOLUTE_PATH = 161 MAPPED PATH = 231END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 162

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 $ABSOLUTE_PATH = 162$ $MAPPED_PATH = 14$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 163ABSOLUTE PATH = 163 MAPPED PATH = 30 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 164ABSOLUTE PATH = 164 $MAPPED_PATH = 46$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 165 $ABSOLUTE_PATH = 165$ $MAPPED_PATH = 62$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 166ABSOLUTE PATH = 166 MAPPED PATH = 78 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 167 $ABSOLUTE_PATH = 167$ $MAPPED_PATH = 94$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 168ABSOLUTE PATH = 168 MAPPED PATH = 110 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 169ABSOLUTE PATH = 169 $MAPPED_PATH = 126$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 170 $ABSOLUTE_PATH = 170$ $MAPPED_PATH = 142$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 171ABSOLUTE PATH = 171 MAPPED PATH = 158END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 172 $ABSOLUTE_PATH = 172$ $MAPPED_PATH = 174$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 173ABSOLUTE PATH = 173 MAPPED PATH = 190 END OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY

CLASS = 174 $ABSOLUTE_PATH = 174$ $MAPPED_PATH = 206$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 175ABSOLUTE PATH = 175 MAPPED PATH = 222 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 176 $ABSOLUTE_PATH = 176$ $MAPPED_PATH = 5$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 177 $ABSOLUTE_PATH = 177$ MAPPED PATH = 21END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 178ABSOLUTE PATH = 178 MAPPED PATH = 37END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 179 $ABSOLUTE_PATH = 179$ $MAPPED_PATH = 53$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 180ABSOLUTE PATH = 180 MAPPED PATH = 69END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 181ABSOLUTE_PATH = 181 $MAPPED_PATH = 85$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 182 $ABSOLUTE_PATH = 182$ MAPPED PATH = 101 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 183ABSOLUTE PATH = 183 $MAPPED_PATH = 117$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 184ABSOLUTE_PATH = 184 $MAPPED_PATH = 133$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 185ABSOLUTE PATH = 185 MAPPED PATH = 149END OBJECT = PATHMAP ENTRY

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OBJECT = PATHMAP_ENTRY CLASS = 186ABSOLUTE_PATH = 186 $MAPPED_PATH = 165$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 187ABSOLUTE PATH = 187 MAPPED PATH = 181 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 188ABSOLUTE_PATH = 188 $MAPPED_PATH = 197$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 189ABSOLUTE PATH = 189 MAPPED PATH = 213 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 190ABSOLUTE PATH = 190 $MAPPED_PATH = 229$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 191 $ABSOLUTE_PATH = 191$ $MAPPED_PATH = 12$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 192ABSOLUTE PATH = 192 MAPPED PATH = 28 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 193 $ABSOLUTE_PATH = 193$ $MAPPED_PATH = 44$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 194ABSOLUTE PATH = 194 MAPPED PATH = 60END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 195ABSOLUTE PATH = 195 $MAPPED_PATH = 76$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 196ABSOLUTE_PATH = 196 $MAPPED_PATH = 92$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 197ABSOLUTE PATH = 197 MAPPED PATH = 108

END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 198ABSOLUTE_PATH = 198 MAPPED PATH = 124END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 199ABSOLUTE PATH = 199 MAPPED PATH = 140 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 200ABSOLUTE_PATH = 200 $MAPPED_PATH = 156$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 201ABSOLUTE PATH = 201 MAPPED PATH = 172END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 202 $ABSOLUTE_PATH = 202$ $MAPPED_PATH = 188$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 203 $ABSOLUTE_PATH = 203$ $MAPPED_PATH = 204$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 204ABSOLUTE PATH = 204 MAPPED PATH = 220 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 205 $ABSOLUTE_PATH = 205$ $MAPPED_PATH = 3$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 206ABSOLUTE PATH = 206 MAPPED PATH = 19END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 207 $ABSOLUTE_PATH = 207$ $MAPPED_PATH = 35$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 208ABSOLUTE_PATH = 208 $MAPPED_PATH = 51$

END_OBJECT = PATHMAP_ENTRY
OBJECT = PATHMAP_ENTRY
 CLASS = 209

ABSOLUTE PATH = 209

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 $MAPPED_PATH = 67$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 210ABSOLUTE PATH = 210 MAPPED PATH = 83 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 211ABSOLUTE PATH = 211 MAPPED PATH = 99 END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 212 $ABSOLUTE_PATH = 212$ $MAPPED_PATH = 115$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 213ABSOLUTE PATH = 213 MAPPED PATH = 131END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 214 $ABSOLUTE_PATH = 214$ $MAPPED_PATH = 147$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 215ABSOLUTE PATH = 215 MAPPED PATH = 163END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 216ABSOLUTE PATH = 216 $MAPPED_PATH = 179$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 217 $ABSOLUTE_PATH = 217$ $MAPPED_PATH = 195$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 218ABSOLUTE PATH = 218 MAPPED PATH = 211 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 219 $ABSOLUTE_PATH = 219$ $MAPPED_PATH = 227$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 220ABSOLUTE PATH = 220 MAPPED PATH = 10 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 221

 $ABSOLUTE_PATH = 221$ $MAPPED_PATH = 26$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 222ABSOLUTE PATH = 222 MAPPED PATH = 42END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 223ABSOLUTE PATH = 223 $MAPPED_PATH = 58$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 224 $ABSOLUTE_PATH = 224$ $MAPPED_PATH = 74$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 225ABSOLUTE PATH = 225 MAPPED PATH = 90 END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 226 $ABSOLUTE_PATH = 226$ $MAPPED_PATH = 106$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 227ABSOLUTE PATH = 227 MAPPED PATH = 122END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP ENTRY CLASS = 228ABSOLUTE PATH = 228 $MAPPED_PATH = 138$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 229 $ABSOLUTE_PATH = 229$ $MAPPED_PATH = 154$ END OBJECT = PATHMAP ENTRY OBJECT = PATHMAP_ENTRY CLASS = 230ABSOLUTE PATH = 230 MAPPED PATH = 170END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP_ENTRY CLASS = 231 $ABSOLUTE_PATH = 231$ $MAPPED_PATH = 186$ END_OBJECT = PATHMAP_ENTRY OBJECT = PATHMAP ENTRY CLASS = 232ABSOLUTE PATH = 232 MAPPED PATH = 202 END OBJECT = PATHMAP ENTRY

OBJECT = PATHMAP ENTRY

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```
CLASS = 233
ABSOLUTE_PATH = 233
MAPPED_PATH = 218
END_OBJECT = PATHMAP_ENTRY
```

A.4 Typical Terra MODIS PGE & ESDT ODL Files

Listings are provided for the following MODIS ODL files:

A.4.1 MODIS PGE ODL for PGE_NAME PGE01

A.4.2 MODIS ESDT MOD000 ODL

A.4.3 MODIS ESDT MOD01 ODL

A.4.4 MODIS ESDT MOD01LUT ODL

A.4.5 MODIS ESDT MOD03 ODL

A.4.6 MODIS ESDT MOD03LUT ODL

A.4.7 MODIS PGE ODL for PGE_NAME PGE03

A.4.8 GDAS_0ZF ODL

A.4.9 OZ_DAILY ODL

A.4.10 REYNSST ODL

A.4.11 SEA_ICE ODL

A.4.12 NISE ODL

A typical MODIS PGE will differ from the examples here by the PGE_NAME, the specific input/output files referenced, and runtime parameters. However, the overall structure of a given MODIS PGE ODL file would be similar to the ones used here. (N.B. The ODL files shown here are associated with the MODIS version 2.1 software)

A.4.1 MODIS PGE PGE01 ODL

```
PGE_NAME = "PGE01"
PGE_VERSION = "2.1"
PROFILE_ID = 1
PROFILE_DESCRIPTION = "The profile for MOD_PR01 and MOD_PR03 "
PLATFORM = "AM1"
INSTRUMENT = "MODIS"
MINIMUM_OUTPUTS = 0
SCHEDULE_TYPE = "Time"
PROCESSING_PERIOD = "MINS=15"
PROCESSING_BOUNDARY = "START_OF_MIN"
PGE_SSW_VERSION = "2.1"
QUERY_DELAY = 0

OBJECT = EXIT_MESSAGE
CLASS= 1
EXIT_CODE = 0
```

```
EXIT_MESSAGE = "PGE01 Exit"
END_OBJECT = EXIT_MESSAGE
OBJECT = EXIT_DEPENDENCY
  CLASS= 1
  DEPENDENCY_PGE_NAME = "none"
  DEPENDENCY SSW VERSION = "none"
  EXIT OPERATION = "="
  EXIT CODE = 0
END OBJECT = EXIT DEPENDENCY
OBJECT = PCF ENTRY
  CLASS = 10
  LOGICAL_ID = 599001
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MOD000"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN_PERIOD_OFFSET = -7200
  END\_PERIOD\_OFFSET = -7200
  INPUT TYPE = "Optional"
  ALIGN DPR TIME WITH INPUT TIME = "N"
  NUMBER NEEDED = 1
  QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "LO Data Files"
      CLASS = 1
   END_OBJECT = FILETYPE
   OBJECT = OPTIONAL_INPUT
     CLASS = 1
      ORDER = 1
     RUNTIME PARM ID = 51
      TIMER = "HOURS=4"
     TEMPORAL = "N"
   END_OBJECT = OPTIONAL_INPUT
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 11
  LOGICAL_ID = 599002
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MOD000"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
  END_PERIOD_OFFSET = 0
   INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
   QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "L0 Data Files"
      CLASS = 1
   END OBJECT = FILETYPE
```

```
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 12
  LOGICAL ID = 599003
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MOD01LUT"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
  END_PERIOD_OFFSET = 0
  SCIENCE_GROUP = "L1"
  INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
  OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 15
  LOGICAL_ID = 600020
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MOD01LUT"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
  END PERIOD OFFSET = 0
  SCIENCE GROUP = "L2"
  INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE NAME = "Two GEO parameter data files"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 17
  LOGICAL_ID = 10501
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "AM1EPHN0"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
  END PERIOD OFFSET = 0
   INPUT_TYPE = "Required"
```

```
ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 18
  LOGICAL_ID = 10502
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "AM1ATTN0"
  DATA_TYPE_VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
  END PERIOD OFFSET = 0
  INPUT TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 110
  LOGICAL ID = 500100
  PCF_FILE_TYPE = 2
  DATA_TYPE_NAME = "MOD01"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULE_YIELD = 3
  MAX_GRANULE_YIELD = 3
  ASSOCIATED_MCF_ID = 500500
  SCIENCE_GROUP = "S1"
  INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM SIZE = 0
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 111
  LOGICAL_ID = 600000
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MOD03"
  DATA TYPE VERSION = "001"
  MIN GRANULE YIELD = 3
```

```
MAX_GRANULE_YIELD = 3
  ASSOCIATED_MCF_ID = 600111
   SCIENCE GROUP = "S2"
  INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM SIZE = 0
  OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 113
  LOGICAL_ID = 503000
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Length of L1A granules in seconds"
   PGE_PARAMETER_DEFAULT = "300.00000"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 114
  LOGICAL_ID = 504000
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Scan rate for L1A granule"
  PGE_PARAMETER_DEFAULT = "1.477"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 115
  LOGICAL ID = 505000
  PCF FILE TYPE = 5
  PGE PARAMETER NAME = "PGE version for L1A granule"
  PGE_PARAMETER_DEFAULT = "2.1.1"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 116
  LOGICAL_ID = 800510
  PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "SatelliteInstrument; AM1M-Terra, PM1M-Aqua"
   PGE_PARAMETER_DEFAULT = "AM1M"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 117
  LOGICAL_ID = 800500
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "PGE01 Version"
   PGE_PARAMETER_DEFAULT = "2.1.1"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 118
```

```
LOGICAL_ID = 600280
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Source for spacecraft kinematic state"
   PGE_PARAMETER_DEFAULT = "SDP Toolkit"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 119
  LOGICAL ID = 600310
  PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Terrain Correction Flag"
   PGE_PARAMETER_DEFAULT = "TRUE"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 120
  LOGICAL ID = 600001
  PCF FILE TYPE = 5
  PGE PARAMETER NAME = "LOCALVERSIONID"
   PGE_PARAMETER_DEFAULT = "2.1.2"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
```

END

A.4.2 MODIS ESDT MOD000 ODL

```
DATA_TYPE_NAME = "MOD000"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MODIS"
PLATFORM = "EOSAM1"
DATA_TYPE_DESCRIPTION = "LO Input of PGE MOD_PR01"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 569.0
PROCESSING_LEVEL = "L0"
HDF_DATA = "N"
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "GSFC"
PERIOD = "HOURS=2"
BOUNDARY = "START_OF_DAY"
DELAY = 43200
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
  USED_BY = "GSFC"
END_OBJECT = USE_OBJECT
OBJECT = FILETYPE
   CLASS = 1
   FILETYPE_NAME = "L0 Data Files"
  MAXIMUM_NUM_FILES = 6
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
END
```

A.4.3 MODIS ESDT MOD01 ODL

```
DATA TYPE NAME = "MOD01"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MODIS"
PLATFORM = "EOSAM1"
DATA_TYPE_DESCRIPTION = "An Input of PGE MOD_PR02"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 569.0
PROCESSING_LEVEL = "L1A"
HDF_DATA = "Y"
DYNAMIC_FLAG = "I"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "GSFC"
PERIOD = "MINS=5"
BOUNDARY = "START_OF_MIN"
DELAY = 43200
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
END
```

A.4.4 MODIS ESDT MOD01LUT ODL

```
DATA_TYPE_NAME = "MOD01LUT"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MODIS"
PLATFORM = "EOSAM1"
DATA_TYPE_DESCRIPTION = "An Input (static) of PGE MOD01"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 0.357
PROCESSING_LEVEL = "L1"
HDF DATA = "N"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
  CLASS = 1
  USED BY = "GSFC"
END_OBJECT = USE_OBJECT
END
```

A.4.5 MODIS ESDT MOD03 ODL

```
DATA_TYPE_NAME = "MOD03"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "MODIS"

PLATFORM = "EOSAM1"

DATA_TYPE_DESCRIPTION = "Input/Output of PGE MOD_PR29/MOD_PR03"

PROVIDER = "Goddard Space Flight Center"

NOMINAL_SIZE = 58.0

PROCESSING_LEVEL = "Geo"

HDF_DATA = "Y"

DYNAMIC_FLAG = "I"

PREDICTION_METHOD = "ROUTINE"

SUPPLIER NAME = "GSFC"
```

```
PERIOD = "MINS=5"
BOUNDARY = "START_OF_MIN"
DELAY = 43200
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
    CLASS = 1
    USED_BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
END
END
```

A.4.6 MODIS ESDT MOD03LUT ODL

```
DATA_TYPE_NAME = "MOD03LUT"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MODIS"
PLATFORM = "EOSAM1"
DATA TYPE DESCRIPTION = "An Input (static) of PGE MOD PR03"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 0.357
PROCESSING_LEVEL = "L1"
HDF_DATA = "N"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
  USED_BY = "GSFC"
END OBJECT = USE OBJECT
OBJECT = FILETYPE
   CLASS = 1
   FILETYPE_NAME = "Two GEO_parameter data files"
  MAXIMUM_NUM_FILES = 2
END_OBJECT = FILETYPE
END
```

A.4.7 MODIS PGE PGE03 ODL

```
PGE_NAME = "TerraPGE03"
PGE_VERSION = "3.0.0"
PROFILE_ID = 1
PROFILE_DESCRIPTION = "First Step in Level 2 Processing"
PGE_DEFAULT_PROFILE = "N"
PLATFORM = "AM1"
INSTRUMENT = "MODIS"
MINIMUM_OUTPUTS = 0
SCHEDULE TYPE = "Time"
PROCESSING_PERIOD = "MINS=5"
PROCESSING_BOUNDARY = "START_OF_MIN"
PGE_SSW_VERSION = "3.0.0"
QUERY_DELAY = 0
OBJECT = EXIT_MESSAGE
   CLASS= 1
   EXIT\_CODE = 0
   EXIT_MESSAGE = "none"
END_OBJECT = EXIT_MESSAGE
OBJECT = EXIT_DEPENDENCY
   CLASS= 1
   DEPENDENCY_PGE_NAME = "none"
```

```
DEPENDENCY_SSW_VERSION = "none"
  EXIT_OPERATION = "="
  EXIT\_CODE = 0
END_OBJECT = EXIT_DEPENDENCY
OBJECT = PCF ENTRY
  CLASS = 11
  LOGICAL ID = 600000
  PCF_FILE_TYPE = 1
  DATA TYPE NAME = "MOD03"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  BEGIN_PERIOD_OFFSET = 0
  END_PERIOD_OFFSET = 0
  INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 12
  LOGICAL_ID = 700000
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MOD02QKM"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
  END PERIOD OFFSET = 0
  INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 13
  LOGICAL_ID = 700002
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MOD021KM"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  BEGIN_PERIOD_OFFSET = 0
  END PERIOD OFFSET = 0
   INPUT TYPE = "Required"
  ALIGN DPR TIME WITH INPUT TIME = "N"
  NUMBER NEEDED = 1
```

```
QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 21
  LOGICAL ID = 900000
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "GDAS_0ZF"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  BEGIN_PERIOD_OFFSET = -10650
  END_PERIOD_OFFSET = 10650
  INPUT TYPE = "Required"
  ALIGN DPR TIME WITH INPUT TIME = "N"
  NUMBER NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 22
  LOGICAL ID = 900020
  PCF FILE TYPE = 1
  DATA TYPE NAME = "OZ DAILY"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  BEGIN_PERIOD_OFFSET = -43200
  END_PERIOD_OFFSET = 43200
  INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 23
  LOGICAL_ID = 900030
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "REYNSST"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
```

```
END_PERIOD_OFFSET = 0
   INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 24
  LOGICAL_ID = 900040
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "SEA_ICE"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = -43200
  END_PERIOD_OFFSET = 43200
  INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
  END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 25
  LOGICAL ID = 900100
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "NISE"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  BEGIN_PERIOD_OFFSET = 0
  END_PERIOD_OFFSET = 0
  INPUT TYPE = "Required"
  ALIGN DPR TIME WITH INPUT TIME = "N"
  NUMBER NEEDED = 1
  QUERY TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 31
  LOGICAL ID = 420011
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MOD07LUT"
```

```
DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  BEGIN_PERIOD_OFFSET = 0
  END PERIOD OFFSET = 0
   SCIENCE GROUP = "L1"
   INPUT TYPE = "Required"
  ALIGN DPR TIME WITH INPUT TIME = "N"
  NUMBER NEEDED = 1
   QUERY TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 32
  LOGICAL ID = 420012
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MOD07LUT"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  BEGIN_PERIOD_OFFSET = 0
  END_PERIOD_OFFSET = 0
   SCIENCE_GROUP = "L2"
  INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 33
  LOGICAL_ID = 422501
  PCF FILE TYPE = 1
  DATA_TYPE_NAME = "MOD35ANC"
  DATA_TYPE_VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN_PERIOD_OFFSET = 0
  END_PERIOD_OFFSET = 0
   SCIENCE_GROUP = "L1"
   INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
   QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
```

```
END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 34
  LOGICAL_ID = 900600
  PCF FILE TYPE = 1
  DATA TYPE NAME = "MOD35ANC"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
  END_PERIOD_OFFSET = 0
   SCIENCE_GROUP = "L2"
   INPUT_TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
  SPATIAL_TIME_DELTA = 0
  KEY INPUT = "N"
  OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 35
  LOGICAL_ID = 900601
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "MOD35ANC"
  DATA_TYPE_VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  BEGIN PERIOD OFFSET = 0
  END PERIOD OFFSET = 0
   SCIENCE GROUP = "L3"
  INPUT TYPE = "Required"
  ALIGN_DPR_TIME_WITH_INPUT_TIME = "N"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
   SPATIAL_TIME_DELTA = 0
  KEY_INPUT = "N"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 122
  LOGICAL_ID = 402500
  PCF_FILE_TYPE = 2
  DATA_TYPE_NAME = "MODVOLC"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULE_YIELD = 1
  MAX_GRANULE_YIELD = 1
  ASSOCIATED_MCF_ID = 402503
   SCIENCE GROUP = "S1"
   INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM SIZE = 0
```

```
OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 123
  LOGICAL ID = 420000
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MOD07 L2"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULE_YIELD = 1
  MAX_GRANULE_YIELD = 1
  ASSOCIATED_MCF_ID = 420001
  SCIENCE GROUP = "S2"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM SIZE = 0
  OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 124
  LOGICAL_ID = 420002
  PCF_FILE_TYPE = 2
  DATA_TYPE_NAME = "MOD07_QC"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULE_YIELD = 0
  MAX GRANULE YIELD = 1
  ASSOCIATED MCF ID = 420003
  SCIENCE GROUP = "S3"
  INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM SIZE = 0
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
  END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 125
  LOGICAL_ID = 422500
  PCF FILE TYPE = 2
  DATA TYPE NAME = "MOD35 L2"
  DATA TYPE VERSION = "001"
  MIN GRANULE YIELD = 1
  MAX_GRANULE_YIELD = 1
  ASSOCIATED_MCF_ID = 422506
  SCIENCE_GROUP = "S4"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
  END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
```

```
OBJECT = PCF_ENTRY
  CLASS = 126
  LOGICAL_ID = 422551
  PCF_FILE_TYPE = 2
  DATA TYPE NAME = "MOD35 QC"
  DATA_TYPE_VERSION = "001"
  MIN GRANULE YIELD = 1
  MAX GRANULE YIELD = 1
  ASSOCIATED_MCF_ID = 422507
  SCIENCE GROUP = "S5"
  INSTANCE = 0
  MINIMUM_SIZE = 0
  MAXIMUM_SIZE = 0
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 127
  LOGICAL ID = 422552
  PCF FILE TYPE = 2
  DATA_TYPE_NAME = "MODCSR_G"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULE_YIELD = 1
  MAX_GRANULE_YIELD = 1
  ASSOCIATED_MCF_ID = 422510
  SCIENCE GROUP = "S6"
  INSTANCE = 0
  MINIMUM SIZE = 0
  MAXIMUM SIZE = 0
  OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 129
  LOGICAL_ID = 800510
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "SatelliteInstrument"
  PGE_PARAMETER_DEFAULT = "AM1M"
  PGE PARAMETER DYNAMIC VALUE = "NONE"
  PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 130
  LOGICAL ID = 402502
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "RP Reference to VOLCALERT"
   PGE_PARAMETER_DEFAULT = "402500:1"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 131
  LOGICAL ID = 420004
  PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "MOD PR07.gc"
```

```
PGE_PARAMETER_DEFAULT = "420002:1"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 132
  LOGICAL ID = 421000
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Number Of Invent RP"
   PGE PARAMETER DEFAULT = "4"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 133
  LOGICAL_ID = 421001
   PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Name_1 "
   PGE_PARAMETER_DEFAULT = "REPROCESSINGACTUAL"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 134
  LOGICAL_ID = 421002
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Value_1"
   PGE_PARAMETER_DEFAULT = "processed once"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 135
  LOGICAL ID = 421003
   PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Name_2 "
   PGE_PARAMETER_DEFAULT = "REPROCESSINGPLANNED"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 136
  LOGICAL ID = 421004
   PCF FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Value_2"
   PGE PARAMETER DEFAULT = "further update is anticipated"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
   CLASS = 137
  LOGICAL_ID = 421005
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Name_3 "
   PGE_PARAMETER_DEFAULT = "LOCALVERSIONID"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
```

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```
CLASS = 138
  LOGICAL ID = 421006
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Value_3"
   PGE_PARAMETER_DEFAULT = "002"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 139
  LOGICAL ID = 421007
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Name_4 "
   PGE_PARAMETER_DEFAULT = "PGEVERSION"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 140
  LOGICAL ID = 421008
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Inventory_RP_Value_4"
   PGE_PARAMETER_DEFAULT = "3.0.0"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 141
  LOGICAL ID = 421100
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Number Of Archive RP"
   PGE_PARAMETER_DEFAULT = "8"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 142
  LOGICAL_ID = 421101
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_1 "
   PGE_PARAMETER_DEFAULT = "ALGORITHMPACKAGEACCEPTANCEDATE"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 143
  LOGICAL ID = 421102
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive_RP_Value_1"
   PGE_PARAMETER_DEFAULT = "June 1997"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 144
  LOGICAL ID = 421103
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Archive RP Name 2 "
   PGE_PARAMETER_DEFAULT = "ALGORITHMPACKAGEMATURITYCODE"
```

```
PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 145
  LOGICAL ID = 421104
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Archive RP Value 2"
   PGE PARAMETER DEFAULT = "at-launch"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 146
  LOGICAL_ID = 421105
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_3 "
   PGE PARAMETER DEFAULT = "ALGORITHMPACKAGENAME"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 147
  LOGICAL_ID = 421106
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive_RP_Value_3"
   PGE_PARAMETER_DEFAULT = "ATBD-MOD-07"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 148
  LOGICAL ID = 421107
   PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_4 "
   PGE PARAMETER DEFAULT = "ALGORITHMPACKAGEVERSION"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 149
  LOGICAL ID = 421108
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Archive RP Value 4"
   PGE_PARAMETER_DEFAULT = "2"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 150
  LOGICAL_ID = 421109
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_5 "
   PGE_PARAMETER_DEFAULT = "INSTRUMENTNAME"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 151
```

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```
LOGICAL_ID = 421110
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive_RP_Value_5"
   PGE_PARAMETER_DEFAULT = "Moderate Resolution Imaging Spectroradiometer"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 152
  LOGICAL ID = 421111
  PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_6"
   PGE_PARAMETER_DEFAULT = "Profiles_Algorithm_Version_Number"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 153
  LOGICAL ID = 421112
  PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Archive RP Value 6"
   PGE PARAMETER DEFAULT = "1"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 154
  LOGICAL_ID = 421113
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Archive RP_Name_7 "
   PGE PARAMETER DEFAULT = "Total Ozone Algorithm Version Number"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 155
  LOGICAL_ID = 421114
  PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive_RP_Value_7"
   PGE_PARAMETER_DEFAULT = "1"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 156
  LOGICAL ID = 421115
   PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_8 "
   PGE_PARAMETER_DEFAULT = "Stability_Indices_Algorithm_Version_Number"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 157
  LOGICAL ID = 421116
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Archive RP Value 8"
   PGE PARAMETER DEFAULT = "1"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
```

```
PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 158
  LOGICAL ID = 422508
  PCF FILE TYPE = 5
   PGE PARAMETER NAME = "MOD35 QC.qc"
   PGE PARAMETER DEFAULT = "422551:1"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 159
  LOGICAL_ID = 424000
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "MOD35_Num_InvMet_RP_Pairs"
   PGE_PARAMETER_DEFAULT = "4"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 160
  LOGICAL ID = 424001
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Name_1 "
   PGE_PARAMETER_DEFAULT = "REPROCESSINGACTUAL"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 161
  LOGICAL ID = 424002
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Inventory RP Value 1"
   PGE_PARAMETER_DEFAULT = "processed once"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 162
  LOGICAL_ID = 424003
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Name_2 "
   PGE PARAMETER DEFAULT = "REPROCESSINGPLANNED"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
   CLASS = 163
  LOGICAL_ID = 424004
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Value_2"
   PGE_PARAMETER_DEFAULT = "further update is anticipated"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 164
  LOGICAL ID = 424005
```

```
PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Name_3 "
   PGE_PARAMETER_DEFAULT = "LOCALVERSIONID"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 165
  LOGICAL ID = 424006
   PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Value_3"
   PGE_PARAMETER_DEFAULT = "002"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 166
  LOGICAL ID = 424007
   PCF FILE_TYPE = 5
   PGE PARAMETER NAME = "Inventory RP Name 4 "
   PGE_PARAMETER_DEFAULT = "PGEVERSION"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 167
  LOGICAL_ID = 424008
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Inventory_RP_Value_4"
   PGE_PARAMETER_DEFAULT = "2.6.1"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
  PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 168
  LOGICAL ID = 424100
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "MOD35_Num_ArchMet_RP_Pairs"
   PGE_PARAMETER_DEFAULT = "5"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 169
  LOGICAL ID = 424101
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Archive RP_Name_1 "
   PGE_PARAMETER_DEFAULT = "ALGORITHMPACKAGEACCEPTANCEDATE"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
   CLASS = 170
   LOGICAL_ID = 424102
   PCF_FILE_TYPE = 5
   PGE PARAMETER NAME = "Archive RP Value 1"
   PGE_PARAMETER_DEFAULT = "June 1997"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
```

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```
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 171
  LOGICAL ID = 424103
  PCF FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_2 "
   PGE_PARAMETER_DEFAULT = "ALGORITHMPACKAGEMATURITYCODE"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 172
  LOGICAL_ID = 424104
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive_RP_Value_2"
   PGE_PARAMETER_DEFAULT = "at-launch"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 173
  LOGICAL ID = 424105
   PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_3 "
   PGE_PARAMETER_DEFAULT = "ALGORITHMPACKAGENAME"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 174
  LOGICAL ID = 424106
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Archive RP Value 3"
   PGE PARAMETER DEFAULT = "ATBD-MOD-06"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 175
  LOGICAL_ID = 424107
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive RP_Name_4"
   PGE PARAMETER DEFAULT = "ALGORITHMPACKAGEVERSION"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 176
  LOGICAL_ID = 424108
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Archive_RP_Value_4"
   PGE_PARAMETER_DEFAULT = "2"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 177
  LOGICAL ID = 424109
  PCF FILE TYPE = 5
```

```
PGE_PARAMETER_NAME = "Archive RP_Name_5 "
   PGE_PARAMETER_DEFAULT = "INSTRUMENTNAME"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 178
  LOGICAL ID = 424110
  PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Archive RP Value 5"
   PGE_PARAMETER_DEFAULT = "Moderate Resolution Imaging Spectroradiometer"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 179
  LOGICAL ID = 424300
  PCF FILE TYPE = 5
   PGE PARAMETER NAME = "UW DEBUG; 0 to 4, no output to reams"
   PGE_PARAMETER_DEFAULT = "0"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 180
  LOGICAL_ID = 424301
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Processing Range Begin Line"
   PGE_PARAMETER_DEFAULT = "0"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 181
  LOGICAL ID = 424302
  PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Processing Range Number of Lines"
   PGE_PARAMETER_DEFAULT = "0"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
  PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 182
  LOGICAL ID = 424303
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Processing Range Begin Element"
   PGE PARAMETER DEFAULT = "0"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE_SELECTOR_PGE_PARAMETER = "N"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 183
  LOGICAL_ID = 424304
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Processing Range Number of Elements"
   PGE_PARAMETER_DEFAULT = "0"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
   PROFILE SELECTOR PGE PARAMETER = "N"
END OBJECT = PCF ENTRY
```

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A.4.8 GDAS_0ZF ODL

```
DATA_TYPE_NAME = "GDAS_0ZF"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "MODIS"
PLATFORM = "EOSAM1"
DATA_TYPE_DESCRIPTION = "NCEP 6-Hour Atmospheric Profile"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 21.0
PROCESSING_LEVEL = "L1"
HDF_DATA = "N"
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "NCEP"
PERIOD = "HOURS=6"
BOUNDARY = "START_OF_6HOUR"
DURATION = "SECS=1"
DELAY = 10
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
  USED_BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
END
```

A.4.9 OZ DAILY ODL

```
The same as GDAS_0ZF ODL except the following items:

DATA_TYPE_NAME = "OZ_DAILY"

DATA_TYPE_DESCRIPTION = "TOVS Column Ozone Daily Product"

NOMINAL_SIZE = 0.10

PERIOD = "DAYS=1"

BOUNDARY = "START_OF_DAY+43200"

DURATION = "SECS=1"
```

A.4.10 REYNSST ODL

```
The same as GDAS_0ZF ODL except the following items:

DATA_TYPE_NAME = "REYNSST"

DATA_TYPE_DESCRIPTION = "Reynolds Weekly SST"

NOMINAL_SIZE = 0.30

PERIOD = "SECS=604800"

BOUNDARY = "START_OF_WEEK-86400"

DURATION = "SECS=604800"
```

A.4.11 SEA ICE ODL

```
The same as GDAS_0ZF ODL except the following items:

DATA_TYPE_NAME = "SEA_ICE"

DATA_TYPE_DESCRIPTION = "NCEP Ice Concentration"
```

```
NOMINAL_SIZE = 0.30

PERIOD = "SECS=86400"

BOUNDARY = "START_OF_DAY"

DURATION = "SECS=1"
```

A.4.12 NISE ODL

```
The same as GDAS_0ZF ODL except the following items:

DATA_TYPE_NAME = "NISE"

DATA_TYPE_DESCRIPTION = "NSIDC NISE snow/ice extent"

NOMINAL_SIZE = 0.03

PERIOD = "DAYS=1"

BOUNDARY = "START_OF_DAY"

DURATION = "DAYS=1"
```

A.5 Typical AIRS PGE & ESDT ODL Files

Listings are provided for the following AIRS ODL files:

- A.5.1 AIRS PGE ODL for PGE_NAME AiL1A_AMSU
- A.5.2 AIRS ESDT AIR10SCI ODL
- A.5.3 AIRS ESDT AIR10SCC ODL
- A.5.4 AIRS ESDT AIR20SCI ODL
- A.5.5 AIRS ESDT PMCO HK ODL
- A.5.6 AIRS ESDT PM1EPHND ODL
- A.5.7 AIRS ESDT PM1ATTNR ODL
- A.5.8 AIRS ESDT AIRAASCI ODL
- A.5.9 AIRS ESDT AIRXADCM ODL
- A.5.10 AIRS ESDT AIRXATCM ODL
- A.5.11 AIRS ESDT AIRXATCS ODL
- A.5.12 AIRS ESDT AIRXARYL ODL
- A.5.13 AIRS ESDT AIRXAGEO ODL

A typical AIRS PGE will differ from the examples here by the PGE_NAME, the specific input/output files referenced, and runtime parameters. However, the overall structure of a given AIRS PGE ODL file would be similar to the ones used here. (N.B. The ODL files shown here are associated with the AIRS version 2.1.2 software.)

A.5.1 AIRS PGE AIL1A AMSU ODL

```
PGE_NAME = "L1A_AMSU"
PGE_VERSION = "212"
```

```
PROFILE_ID = 1
PROFILE_DESCRIPTION = "GRAN01"
PLATFORM = "EOSPM1"
INSTRUMENT = "AIRS"
MINIMUM OUTPUTS = 0
SCHEDULE_TYPE = "Time"
PROCESSING PERIOD = "MINS=6"
PROCESSING BOUNDARY = "START OF DAY-31"
PGE_SSW_VERSION = "212"
/***** Primary Inputs ******/
OBJECT = PCF_ENTRY
   CLASS = 11
  LOGICAL_ID = 261
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "AIR10SCC"
  DATA_TYPE_VERSION = "001"
  BEGIN PERIOD OFFSET = 31
  END PERIOD OFFSET = 31
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  INPUT TYPE = "Required"
    ALIGN_DPR_TIME_WITH_INPUT_TIME = "Y" */
  NUMBER_NEEDED = 1
   QUERY_TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
   CLASS = 12
  LOGICAL ID = 262
  PCF FILE TYPE = 1
  DATA_TYPE_NAME = "AIR10SCI"
  DATA_TYPE_VERSION = "001"
  BEGIN_PERIOD_OFFSET = 31
  END_PERIOD_OFFSET = 31
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  INPUT_TYPE = "Required"
    ALIGN DPR TIME WITH INPUT TIME = "Y" */
  NUMBER NEEDED = 1
   QUERY TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE NAME = "LO Data Files"
      CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
   CLASS = 13
   LOGICAL_ID = 290
   PCF_FILE_TYPE = 1
  DATA TYPE NAME = "AIR20SCI"
  DATA TYPE VERSION = "001"
  BEGIN PERIOD OFFSET = 31
  END PERIOD OFFSET = 31
```

```
MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  INPUT_TYPE = "Required"
    ALIGN_DPR_TIME_WITH_INPUT_TIME = "Y" */
  NUMBER NEEDED = 1
   QUERY TYPE = "Temporal"
   OBJECT = FILETYPE
     FILETYPE NAME = "LO Data Files"
     CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
/******Dynamic ancillary inputs ******/
OBJECT = PCF ENTRY
  CLASS = 14
  LOGICAL_ID = 4007
  PCF_FILE_TYPE = 1
  DATA TYPE NAME = "PMCO HK"
  DATA TYPE VERSION = "001"
  BEGIN_PERIOD_OFFSET = 31
  END PERIOD OFFSET = 31
  MIN GRANULES REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  INPUT_TYPE = "Required"
  /* ALIGN_DPR_TIME_WITH_INPUT_TIME = "Y" */
  NUMBER_NEEDED = 1
   QUERY_TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 14
  LOGICAL ID = 4008
  PCF_FILE_TYPE = 1
  DATA_TYPE_NAME = "PMCO_HK"
  DATA_TYPE_VERSION = "001"
  BEGIN_PERIOD_OFFSET = 31
  END_PERIOD_OFFSET = 31
  MIN_GRANULES_REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  INPUT TYPE = "Required"
  /* ALIGN DPR TIME WITH INPUT TIME = "Y" */
  NUMBER NEEDED = 1
   QUERY TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
/**** Attitude/Ephemeris/DEM entry. Please delete if not used by PGE. ****/
OBJECT = PCF ENTRY
  CLASS = 18
  LOGICAL ID = 10501
  PCF FILE TYPE = 1
  DATA TYPE NAME = "PM1EPHND"
```

```
DATA_TYPE_VERSION = "001"
  BEGIN_PERIOD_OFFSET = 31
  END_PERIOD_OFFSET = 31
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  INPUT TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY TYPE = "Temporal"
  OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 19
  LOGICAL ID = 10502
  PCF FILE TYPE = 1
  DATA_TYPE_NAME = "PM1ATTNR"
  DATA_TYPE_VERSION = "001"
  BEGIN PERIOD OFFSET = 31
  END PERIOD OFFSET = 31
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  INPUT_TYPE = "Required"
  NUMBER\_NEEDED = 1
  QUERY_TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END OBJECT = PCF ENTRY
/********************************/
OBJECT = PCF ENTRY
  CLASS = 110
  LOGICAL_ID = 7120
  PCF_FILE_TYPE = 2
  DATA_TYPE_NAME = "AIRAASCI"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULE_YIELD = 1
  MAX_GRANULE_YIELD = 1
  ASSOCIATED MCF ID = 17120
  SCIENCE GROUP = "S1"
  MINIMUM SIZE = 1
  MAXIMUM SIZE = 100
   OBJECT = FILETYPE
     FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
/************Static ancillary inputs *********/
OBJECT = PCF ENTRY
  CLASS = 116
  LOGICAL ID = 4001
  PCF FILE TYPE = 3
  DATA_TYPE_NAME = "AIRXADCM"
  DATA TYPE VERSION = "001"
```

```
MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
   SCIENCE_GROUP = "0001"
   INPUT_TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 117
  LOGICAL_ID = 4002
  PCF_FILE_TYPE = 3
  DATA_TYPE_NAME = "AIRXATCM"
  DATA TYPE VERSION = "001"
  MIN GRANULES REQUIRED = 1
  MAX GRANULES REQUIRED = 1
  SCIENCE GROUP = "0002"
  INPUT_TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY_TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
     CLASS = 1
   END_OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 118
  LOGICAL ID = 4003
  PCF FILE TYPE = 3
  DATA TYPE NAME = "AIRXATCS"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  SCIENCE_GROUP = "0003"
  INPUT_TYPE = "Required"
  NUMBER_NEEDED = 1
  QUERY_TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
     CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF_ENTRY
  CLASS = 119
  LOGICAL_ID = 4005
  PCF_FILE_TYPE = 3
  DATA_TYPE_NAME = "AIRXARYL"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX GRANULES REQUIRED = 1
   SCIENCE_GROUP = "0004"
  INPUT TYPE = "Required"
  NUMBER NEEDED = 1
```

```
QUERY_TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE_NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 120
  LOGICAL ID = 4006
  PCF_FILE_TYPE = 3
  DATA_TYPE_NAME = "AIRXAGEO"
  DATA_TYPE_VERSION = "001"
  MIN_GRANULES_REQUIRED = 1
  MAX_GRANULES_REQUIRED = 1
  SCIENCE_GROUP = "0005"
  INPUT_TYPE = "Required"
  NUMBER NEEDED = 1
  QUERY TYPE = "Temporal"
   OBJECT = FILETYPE
      FILETYPE NAME = "Single File Granule"
      CLASS = 1
   END OBJECT = FILETYPE
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 125
  LOGICAL_ID = 1001
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Instrument: 0=AMSU, 1=AIRS, 2=HSB(MHS), 3=VIS"
  PGE_PARAMETER_DEFAULT = "0"
  PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 225
  LOGICAL ID = 1002
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Print Level IO: 0=Off, 1=Low, 2=Med, 3=High"
  PGE_PARAMETER_DEFAULT = "2"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 226
  LOGICAL ID = 1003
  PCF FILE TYPE = 5
  PGE PARAMETER NAME = "Print Level: 0=Off, 1=Low, 2=Med, 3=High"
  PGE PARAMETER DEFAULT = "1"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 227
  LOGICAL_ID = 1004
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Exec Development Mode: 0=Off, 1=On"
  PGE_PARAMETER_DEFAULT = "0"
  PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 228
```

```
LOGICAL_ID = 1005
  PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Run Level 2 Mode: 1=MIT & 2=NOAA & 4=GSFC"
   PGE_PARAMETER_DEFAULT = "7"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 126
  LOGICAL ID = 1006
   PCF FILE TYPE = 5
   PGE_PARAMETER_NAME = "Stats Mode: 0=Off, 1=cmp2truth, 2=cmp2MW-retrieval"
   PGE_PARAMETER_DEFAULT = "0"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 128
  LOGICAL_ID = 1011
   PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Year (ex: 1998)"
   PGE_PARAMETER_DEFAULT = "1998"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 129
  LOGICAL_ID = 1012
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Month number (1 - 12)"
   PGE_PARAMETER_DEFAULT = "09"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 130
  LOGICAL ID = 1013
  PCF FILE TYPE = 5
   PGE PARAMETER NAME = "Day of month (1 - 31)"
   PGE_PARAMETER_DEFAULT = "13"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF_ENTRY
  CLASS = 131
  LOGICAL_ID = 1014
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Orbit of day (1 - 17)"
   PGE_PARAMETER_DEFAULT = "1"
   PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 132
  LOGICAL_ID = 1015
   PCF_FILE_TYPE = 5
   PGE_PARAMETER_NAME = "Granule Number (1 - 17)"
   PGE_PARAMETER_DEFAULT = "01"
   PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 133
  LOGICAL ID = 1016
   PCF FILE_TYPE = 5
   PGE PARAMETER NAME = "Granule Size in scansets (1 - 45)"
```

```
PGE_PARAMETER_DEFAULT = "45"
  PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
OBJECT = PCF ENTRY
  CLASS = 134
  LOGICAL ID = 1020
  PCF FILE TYPE = 5
  PGE PARAMETER NAME = "Times Processed: 1 for never before reprocessed"
   PGE PARAMETER DEFAULT = "1"
  PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
  CLASS = 135
  LOGICAL_ID = 1021
  PCF_FILE_TYPE = 5
  PGE_PARAMETER_NAME = "Processing Facility: A for TLSCF or G for GDAAC"
  PGE_PARAMETER_DEFAULT = "G"
  PGE PARAMETER DYNAMIC VALUE = "NONE"
END OBJECT = PCF ENTRY
OBJECT = PCF ENTRY
   CLASS = 200
   LOGICAL ID = 411
    PCF FILE TYPE = 5
    PGE_PARAMETER_NAME = "GDAAC Build Version String"
    PGE_PARAMETER_DEFAULT = "PGE=2.1.2, SDPTK=5.2.7.2, HDF=4.1r3, HDFEOS=2.7,
OS=6.5, COMPILER=7.2.1.3, ECS=6A.03"
    PGE_PARAMETER_DYNAMIC_VALUE = "NONE"
END_OBJECT = PCF_ENTRY
```

A.5.2 AIRS ESDT AIR10SCI ODL

```
DATA_TYPE_NAME = "AIR10SCI"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "AIRS"
PLATFORM = "EOSPM1"
DATA_TYPE_DESCRIPTION = "AMSU_A1 Science Data Packets"
PROVIDER = "Goddard Space Flight Center"
NOMINAL SIZE = .02
PROCESSING_LEVEL = "L0"
HDF_DATA = "N"
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "GSFC"
PERIOD = "HOURS=2"
BOUNDARY = "START_OF_DAY"
SPATIAL_FLAG = "N"
DELAY = 43200
OBJECT = USE_OBJECT
  CLASS = 1
 USED_BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
OBJECT = FILETYPE
   CLASS = 1
   FILETYPE_NAME = "L0 Data Files"
  MAXIMUM_NUM_FILES = 2
END_OBJECT = FILETYPE
```

A.5.3 AIRS ESDT AIR10SCC ODL

```
DATA_TYPE_NAME = "AIR10SCC"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "AIRS"
PLATFORM = "EOSPM1"
DATA_TYPE_DESCRIPTION = "AMSU_A1 Science Data Packets"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = .02
PROCESSING_LEVEL = "L0"
HDF_DATA = "N"
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "GSFC"
PERIOD = "HOURS=2"
BOUNDARY = "START_OF_DAY"
SPATIAL_FLAG = "N"
DELAY = 43200
OBJECT = USE_OBJECT
  CLASS = 1
  USED_BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
OBJECT = FILETYPE
   CLASS = 1
   FILETYPE_NAME = "LO Data Files"
  MAXIMUM_NUM_FILES = 2
END_OBJECT = FILETYPE
END
```

A.5.4 AIRS ESDT AIR20SCI ODL

```
DATA_TYPE_NAME = "AIR20SCI"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "AIRS"
PLATFORM = "EOSPM1"
DATA_TYPE_DESCRIPTION = "AMSU_A2 Science Data Packets"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = .02
PROCESSING_LEVEL = "L0"
HDF_DATA = "N"
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "GSFC"
PERIOD = "HOURS=2"
BOUNDARY = "START_OF_DAY"
SPATIAL_FLAG = "N"
DELAY = 43200
OBJECT = USE_OBJECT
  CLASS = 1
  USED BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
OBJECT = FILETYPE
   CLASS = 1
```

```
FILETYPE_NAME = "L0 Data Files"
MAXIMUM_NUM_FILES = 2
END_OBJECT = FILETYPE
END
```

A.5.5 AIRS ESDT PMCO_HK ODL

```
DATA_TYPE_NAME = "PMCO_HK"
DATA_TYPE_VERSION = "001"
DATA_TYPE_DESCRIPTION = "Aqua Carryout housekeeping file"
INSTRUMENT = "All"
PLATFORM = "Aqua"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 2.0
PROCESSING LEVEL = "L0"
DYNAMIC_FLAG = "E"
PREDICTION_METHOD = "ROUTINE"
SUPPLIER_NAME = "GSFC"
PERIOD = "HOURS=2"
BOUNDARY = "START_OF_DAY"
DELAY = 43200
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
   CLASS = 1
   USED_BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
HDF_DATA = "N"
END
```

A.5.6 AIRS ESDT PM1EPHND ODL

```
DATA_TYPE_NAME = "PM1EPHND"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "All"
PLATFORM = "PM1"
DATA_TYPE_DESCRIPTION = "PM-1 FDD Definitive Ephemeris data in Toolkit format"
PROVIDER = "Goddard Space Flight Center"
NOMINAL SIZE = 6.0
PROCESSING_LEVEL = "L1"
DYNAMIC_FLAG = "I"
SPATIAL_FLAG = "N"
OBJECT = USE_OBJECT
  CLASS = 1
USED_BY = "GSFC"
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
HDF_DATA = "N"
END
```

A.5.7 AIRS ESDT PM1ATTNR ODL

```
DATA_TYPE_NAME = "PM1ATTNR"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "A11"

PLATFORM = "PM1"

DATA_TYPE_DESCRIPTION = "PM-1 Refined Attitude Data in Toolkit format PROVIDER = "Goddard Space Flight Center"

NOMINAL SIZE = 1.0
```

```
PROCESSING_LEVEL = "L1"

DYNAMIC_FLAG = "I"

SPATIAL_FLAG = "N"

OBJECT = USE_OBJECT

CLASS = 1

USED_BY = "GSFC"

END_OBJECT = USE_OBJECT

ARCHIVED_AT = "GSFC"

PROCESSED_AT = "GSFC"

HDF_DATA = "N"

END
```

A.5.8 AIRS ESDT AIRAASCI ODL

```
DATA TYPE NAME = "AIRAASCI"
DATA_TYPE_VERSION = "001"
INSTRUMENT = "AIRS"
PLATFORM = "EOSPM1"
DATA_TYPE_DESCRIPTION = "AMSU-A geolocated science counts"
PROVIDER = "Goddard Space Flight Center"
NOMINAL_SIZE = 3.0
PROCESSING_LEVEL = "L1A"
HDF_DATA = "N"
PERIOD = "SECS=360"
BOUNDARY = "START_OF_SEC"
DYNAMIC_FLAG = "I"
SPATIAL_FLAG = "N"
OBJECT = USE OBJECT
   CLASS = 1
  USED_BY = "GSFC"
END_OBJECT = USE_OBJECT
ARCHIVED_AT = "GSFC"
PROCESSED_AT = "GSFC"
END
```

A.5.9 AIRS ESDT AIRXADCM ODL

```
DATA_TYPE_NAME = "AIRXADCM"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "AIRS"

PLATFORM = "EOSPM1"

DATA_TYPE_DESCRIPTION = "Decommutation map"

PROVIDER = "Goddard Space Flight Center"

NOMINAL_SIZE = 1.0

PROCESSING_LEVEL = "L1A"

HDF_DATA = "N"

DYNAMIC_FLAG = "S"

SPATIAL_FLAG = "N"

END
```

A.5.10 AIRS ESDT AIRXATCM ODL

```
DATA_TYPE_NAME = "AIRXATCM"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "AIRS"

PLATFORM = "EOSPM1"

DATA_TYPE_DESCRIPTION = "Conversion method file"

PROVIDER = "Goddard Space Flight Center"

NOMINAL_SIZE = 1.0

PROCESSING LEVEL = "L1A"
```

```
HDF_DATA = "N"
DYNAMIC_FLAG = "S"
SPATIAL_FLAG = "N"
```

A.5.11 AIRS ESDT AIRXATCS ODL

```
DATA_TYPE_NAME = "AIRXATCS"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "AIRS"

PLATFORM = "EOSPM1"

DATA_TYPE_DESCRIPTION = "Constant sets"

PROVIDER = "Goddard Space Flight Center"

NOMINAL_SIZE = 1.0

PROCESSING_LEVEL = "L1A"

HDF_DATA = "N"

DYNAMIC_FLAG = "S"

SPATIAL_FLAG = "N"

END
```

A.5.12 AIRS ESDT AIRXARYL ODL

```
DATA_TYPE_NAME = "AIRXARYL"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "AIRS"

PLATFORM = "EOSPM1"

DATA_TYPE_DESCRIPTION = "Red Yellow limits"

PROVIDER = "Goddard Space Flight Center"

NOMINAL_SIZE = 1.0

PROCESSING_LEVEL = "L1A"

HDF_DATA = "N"

DYNAMIC_FLAG = "S"

SPATIAL_FLAG = "N"

END
```

A.5.13 AIRS ESDT AIRXAGEO ODL

```
DATA_TYPE_NAME = "AIRXAGEO"

DATA_TYPE_VERSION = "001"

INSTRUMENT = "AIRS"

PLATFORM = "EOSPM1"

DATA_TYPE_DESCRIPTION = "L1A.geolocation.anc"

PROVIDER = "Goddard Space Flight Center"

NOMINAL_SIZE = 1.0

PROCESSING_LEVEL = "L1A"

HDF_DATA = "N"

DYNAMIC_FLAG = "S"

SPATIAL_FLAG = "N"

END
```

A.6 Typical Aqua MODIS PGE ODL File

Listings are provided for the following MODIS ODL files:

A.6.1 ODL files for Aqua MODIS PGE

The Aqua PGE ODL files are similar to those of Terra PGEs. The main differences are DATA_TYPE_NAME for input and output granules:

	Terra	Aqua
L0	MOD000	MODPML0
Static input	MOD01LUT	MYD01LUT
	MOD03LUT	MYD03LUT
	MOD02LUT	MYD02LUT
	MOD07LUT	MYD07LUT
	MOD35ANC	MYD35ANC
Ephemeris	AM1EPHN0	PM1EPHND
Attitude	AM1ATTNF	PM1ATTNR
Products	MOD01	MYD01
	MOD03	MYD03
	MOD02QKM	MYD02QKM
	MOD02HKM	MYD02HKM
	MOD021KM	MYD021KM
	MOD020BC	MYD020BC
	MODVOLC	MYDVOLC
	MOD07_L2	MYD07_L2
	MOD07_QC	MYD07_QC
	MOD35_L2	MYD35_L2
	MOD35_QC	MYD35_QC
	MODCSR_G	MYDCSR_G

Abbreviations and Acronyms

A_o Operational Availability

ACL Access Control List

ACS Automated Cartridge System

ACSLS Automated Cartridge Storage Library System

ADC Affiliated Data Center (NOAA)

ADIC Advanced Digital Information Corporation

ADSERV Advertising Service

AFM Affected File Metadata

AFL Affected File List

Al&T Algorithm Integration and Test

AIT Algorithm Integration Team

ALOG Application Log

AMASS Archival Management and Storage System

APC Access/Process Coordinators

API Application Programming Interface

APID Applications Process Identifier

ASCII American Standard Code for Information Interchange

ASTER Advanced Spaceborne Thermal Emission and Reflection Radiometer

BBS Bulletin Board System

CAP Cartridge Access Port

CCB Configuration Control Board (NASA Convention)

CCR Configuration Change Request

CCRS Canada Centre for Remote Sensing

CD Compact Disk

CDE Common Desktop Environment

CD-ROM Compact Disk - Read Only Memory

CDR Critical Design Review

CDRL Contract Data Requirements List

CDS Cell Directory Service

CHCI Communications Hardware Configuration Item

CHUI Character User Interface

CI Configuration Item

CIDM Client Interoperability and Data Management

CLI Command Line Interface
CM Configuration Management

CMA CM Administrator

CN Change Notice

CO Contracting Officer

COTR Contracting Officer's Technical Representative

COTS Commercial Off-the-Shelf (hardware or software)

CPU Central Processing Unit

CR Change Request

CRM Change Request Manager

CSCI Computer Software Configuration Item

CSMS Communications and Systems Management Segment (ECS)

CSR Consent To Ship Review

CSS Communications Subsystem

DAA Data Availability Acknowledgment

DAAC Distributed Active Archive Center

DADS Data Archive and Distribution System

DAN Data Availability Notice

DAO Data Assimilation Office

DAP Delivered Algorithm Package

DAR Data Acquisition Request

DAS Data Availability Schedule

DAT Digital Audio Tape

DB Database

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DBA Database Administrator

DBMS Database Management System

DBO Database

DCE Distributed Computing Environment (OSF)

DCF Data Capture Facility

DCNDocument Change NoticeDCODocument Change OrderDCRData Collection Request

DD Data Dictionary

DDA Data Delivery Acknowledgment

DDICT Data Dictionary

DDIST Data Distribution

DDL Data Definition Language

DDN Data Delivery Notice

DDSRV Document Data Server

DDTS Distributed Defect Tracking System

DEM Digital Elevation Models
DES Data Encryption Standard

DESKT Desktop Configuration Item

DFA Deleted From Archive

Deletion From Archive

DID Data Item Description

DIF Data Interchange Formant

DIMGR Distributed Information Manager

DLT Digital Linear Tapes

DME Distributed Management Environment

DMO Data Management Organization

DNS Domain Name Service

DOF Distributed Object Framework

DOY Day of Year

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DP Data Pool

DPAD Data Pool Action Dispatcher

DPASU Data Pool Access Statistics Utility

DPIU Data Pool Insert Utility
DPM Data Pool Maintenance

DPREP Data Preprocessing

DPR Data Processing Request

DPS Data Processing Subsystem

DR Delivery Record

DS Data Server

DSI Database Server Interface7

DSS Data Server Subsystem

e-mail Electronic Mail

EBnet EOSDIS Backbone Network (combines Ecom and ESN)

ECHO EOS Clearing House

ECN Equipment Control Number

ECS EOSDIS Core System

EDC EROS Data Center (DAAC)

EDF ECS Development Facility

EDHS ECS Data Handling System

EGS EOS Ground System

EIN Equipment Identification Number

EMC Enterprise Monitoring and Coordination

EMD ECS Maintenance and Development (Project)

EMSn EOS Mission Support Network (formerly EBnet)

EOC EOS Operations Center (ECS)

EOS Earth Observing System

EOSDIS Earth Observing System Data and Information System

EP Evaluation Package

EROS Earth Resources Observation System

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ESD Electrostatic Discharge

ESDIS Earth Science Data and Information System (GSFC Code 505)

ESDT Earth Science Data Type

ESOD Earth Science On-line Directory

ET Eastern (standard or daylight savings) Time

FDD Flight Dynamics Division

FDDI Fiber Distributed Data Interface

FIFO First in First out

FORTRAN FORmula TRANslation (computer language)

FOS Flight Operations Segment (ECS)

FOT Flight Operations Team

FSMS File and Storage Management System

FTP File Transfer Protocol

FTPD File Transfer Protocol Daemon

GB Gigabyte (109)

Gb Gigabit (10⁹)

GBps Gigabytes per Second

Gbps Gigabits per Second

GBAD Ground Based Attitude Determination

GCDIS Global Change Data and Information System

GCMD Global Change Master Directory

GDS Ground Data System

GFE Government Furnished Equipment

GFP Government Furnished Property

GID Group IDs

GIGE Gigabit Ethernet

GSFC Goddard Space Flight Center

GUI Graphical User Interface

H/W Hardware

HDF Hierarchical Data Format

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HIPPI High Performance Parallel Interface

HPOV HP Open View

HSM Hierarchical Storage Management

HTML Hypertext Mark-Up Language HWCI Hardware Configuration Item

I&AT Integration and Acceptance Test

I&T Integration and Test

I&TT Integration and Test Team

IATO Independent Acceptance Test Organization

ICD Interface Control Document

ICLHW Ingest Client Hardware [configuration item]

ILM Inventory, Logistics, and Maintenance

ILP Integrated Logistics Plan

ILS Integrated Logistics Support

ILSMT ILS Management Team

ILSO ILS Office

INGST Ingest Services
INS Ingest System

IOS Interoperability Subsystem

IP Internet Protocol

IQ Intelligent Query and IQ Access

Ir1 Interim Release 1

ISDN Integrated Services Digital Network

ISS Internetworking Subsystem

ISQL Interactive (Structured Query Language) SQL

IV&V Independent Verification and Validation

JIL Job Information Language

JPL Jet Propulsion Laboratory (DAAC)

KB Kilobyte (10^3)

Kb Kilobit (10³)

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KBps Kilobytes per Second

Kbps Kilobits per Second

L-7 Landsat-7 (Landsat-7 for EDHS search)

L0 Level 0

L0-L4 Level 0 (zero) through Level 4 (use Level-0 through Level-4 for EDHS search)

LAN Local Area Network

Landsat Land Remote-Sensing Satellite

LaRC Langley Research Center (DAAC)

LCU Library Control Unit

LDOS Landsat Data and Operations System

LIM Local Information Manager
LIMGR Local Information Manager

LMC Local Maintenance

LMU Library Management Unit

Loral Loral Aerosys (ECS Team)

LRU Line Replaceable Unit

LSM Library Storage Module

LTM Log Transfer Manager

LZPF Level Zero Processing Facility

M Million, mega (prefix)

M&O Maintenance and Operations

MAN Metropolitan Area Network

MB Megabyte (10^6)

Mb Megabit (10^6)

MBps Megabytes per Second

Mbps Megabits per Second

MCF Metadata Configuration File

Metadata Control File

MD Master Directory

MDA Management Data Access

MDT Mean Downtime

MHWCI Management Hardware Configuration Item

MHz Megahertz

MIB Management Information Base

MIS Management Information System

MM Millimeter

MO&DSD Mission Operations and Data Systems Directorate (GSFC Code 500)

MOU Memorandum of Understanding

MR Malfunction Report

MSEC Millisecond

MSFC Marshall Space Flight Center (DAAC)

MSS Systems Management Subsystem

MTBCM Mean Time Between Corrective Maintenance

MTBF Mean Time Between Failure

MTBM Mean Time Between Maintenance

MTBPM Mean Time Between Preventive Maintenance

MTPE Mission to Planet Earth

MTTR Mean Time to Repair

MTTRes Mean Time to Restore

MTU Maximum Transfer Unit

MWO Maintenance Work Order

N/A Not Applicable

NA Network Administrator

NASA National Aeronautics and Space Administration

Nascom NASA Communications

NCC Network Control Center (GSFC)

network communication center

NCEP National Centers for Environmental Prediction

NCR Nonconformance Report

NCS Netscape Commerce Server

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NCSA National Center for Supercomputer Applications

NMCI Network Management Configuration Item

NNM HPOpenView Network Node Manager

NOAA National Oceanic and Atmospheric Administration

NPG NASA Procedures and Guidelines

NSI NASA Science Internet

NWCI Networking Configuration Item

ODL Object Description Language

OEM Original Equipment Manufacturer

OI Operator Interface

OJT On-the-Job Training

OM Order Manager

OPR Operator

OPS Operations

Operations Supervisor

Ops Super Operations Supervisor

ORPA Operations Readiness & Performance Assurance

ORR Operations Readiness Review

OS Operating System

OSF Open Software Foundation

OTS Off the Shelf

OVW HP OpenView Windows

PAIP Performance Assurance Implementation Plan

PB Petabyte (1015)

PC Personal Computer

Process Control

PCF Process Control File

PDL Program Design Language

PDPS Planning and Data Processing System

PDR Product Delivery Record

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PDS Product Distribution System

Production Data Sets

PDSOI Product Distribution System Operator Interface

PDSIS Product Distribution System Interface Server

PGE Product Generation Executable

PGS Product Generation Service

PH Production History

PI Principal Investigator

PIN Password Identification Number

PLANG Production Planning CSCI

PLNHW Planning Hardware [configuration item]

PLS Planning Subsystem

PM Preventative Maintenance

PMPDR Physical Media Product Delivery Record

PPM Principal Period of Maintenance

PR Production Request (s)

PRE Production Request Editor

PRS Primary Replication Server

QA Quality Assurance

Quality Assessment

QAMUT Quality Assessment Metadata Update Tool

QC Quality Control

QRU Query, Retrieve, and Update

R&M Reliability and Maintainability

RAID Redundant Array of Inexpensive Disks

RAM Random Access Memory

RCL Replication Command Language

RE Responsible Engineer

RID Review Item Discrepancy

RMA Return Material Authorization

RMS Resource Management Subsystem

RPC Remote Procedure Call

RRS Replicate Replication Server

RS Replication Server

RSA Replication System Administrator

RSM Replication Server Manager

RSSD Replication Server System Database

S/C Spacecraft
S/W Software

S/WCI Software Configuration Item

SA System Administrator

SATAN Security Administrator Tool for Analyzing Networks

SCDO Science and Communications Development Office (ECS)

SCF Science Computing Facility

SCID Space Craft ID

SCSI Small Computer System Interface

SDP Science Data Processing

SDPF Science Data Processing Facility

SDPS Science Data Processing Segment (ECS)

SDPS/W Science Data Production Software

SDPTK Science Data Processing Toolkit

SDSRV Science Data Server

SE System Engineering

SE&I System Engineering and Integration

SEI&T System Engineering, Integration, and Test

SEO Sustaining Engineering Organization

SEPG Software Engineering Process Group

SGI Silicon Graphics Incorporated

SI&T System Integration and Test

SLA Site License Agreement

Software License Administrator

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SMC System Monitoring and Coordination Center

SMF Status Message Facility

SMTP Simple Mail Transport Protocol

SNMP Simple Network Management Protocol

SOR System Operations Review

SORR Segment Operational Readiness Review

SPRHW Science Processing Hardware [configuration item]

SQL Structured Query Language

SQR SQL Report Writer

SQS Spatial Query Server

SRR System Requirements Review

SSAP Science Software Archive Package

SSH Secure Shell

SSI&T Science Software Integration and Test

SSL Secure Socket Layer

SSS Spatial Subscription Server

Secure Shell Setup

STK Storage Tek

STMGT Storage Management

SubsMgr Subscription Manager

SUBSRV Subscription Server

T&M Time and Materials

TB Terabyte (10^{12})

TBC To Be Confirmed

TBD To Be Determined

TBR To Be Resolved

TBS To Be Supplied

Tbyte Terabyte

TCP/IP Transmission Control Protocol/Internet Protocol

TEC Tivoli Enterprise Console

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telecon Telephone Conference

TELNET Telecommunication Network

TRMM Tropical Rainfall Measurement Mission

TSDIS TRMM Science Data and Information System

TT Trouble Ticket

UDP User Datagram Protocol

UID User IDs

UR Universal Reference

URDB User Recommendations Database

URL Universal Resource Locator

USO User Support Office

US Rep User Services Representative

UWG User Working Group

VDD Version Description Document

VOB Versioned Object Base (ClearCase)

WAIS Wide Area Information Server

WAN Wide Area Network

WKBCH Workbench

WKSHCI Working Storage Hardware Configuration Item

WWW World Wide Web

XLV Logical Volume Disk Driver

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